UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

IN RE LIBOR-BASED FINANCIAL INSTRUMENTS ANTITRUST LITIGATION	MDL No. 2262
THIS DOCUMENT RELATES TO: Case No. 1:13-cv-7005-NRB THE CHARLES SCHWAB CORPORATION; CHARLES SCHWAB BANK, N.A.; CHARLES SCHWAB & CO., INC.; SCHWAB SHORT-TERM BOND MARKET FUND; SCHWAB TOTAL BOND MARKET FUND; SCHWAB U.S. DOLLAR LIQUID ASSETS FUND; SCHWAB MONEY MARKET FUND; SCHWAB VALUE ADVANTAGE MONEY FUND; SCHWAB RETIREMENT ADVANTAGE MONEY FUND; SCHWAB INVESTOR MONEY FUND; SCHWAB CASH RESERVES; SCHWAB ADVISOR CASH RESERVES; SCHWAB YIELDPLUS FUND; and SCHWAB YIELDPLUS FUND LIQUIDATION TRUST, Plaintiffs, v. BANK OF AMERICA CORPORATION; BANK OF AMERICA, N.A.; BANK OF TOKYO-MITSUBISHI UFJ LTD.; BARCLAYS BANK PLC; CITIGROUP, INC.; CITIBANK, N.A.; COÖPERATIEVE CENTRALE RAIFFEISEN-BOERENLEENBANK B.A.; CREDIT SUISSE GROUP AG; DEUTSCHE BANK AG; HSBC HOLDINGS PLC; HSBC BANK PLC; JPMORGAN CHASE & CO.; JPMORGAN CHASE BANK, NATIONAL ASSOCIATION; LLOYDS BANKING GROUP PLC; HBOS PLC; ROYAL BANK OF CANADA; THE NORINCHUKIN BANK; THE ROYAL BANK OF SCOTLAND GROUP PLC; UBS AG; PORTIGON AG (f/k/a WESTLB AG); and WESTDEUTSCHE IMMOBILIENBANK AG, Defendants.	Master File No. 1:11-md-2262-NRB ECF Case **AMENDED COMPLAINT** **JURY TRIAL DEMANDED**

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I. NATURE OF THE ACTION

1. Plaintiffs The Charles Schwab Corporation, Charles Schwab Bank, N.A., Charles Schwab & Co., Inc., Schwab Short-Term Bond Market Fund, Schwab Total Bond Market Fund, Schwab U.S. Dollar Liquid Assets Fund, Schwab Money Market Fund, Schwab Value Advantage Money Fund, Schwab Retirement Advantage Money Fund, Schwab Investor Money Fund, Schwab Cash Reserves, Schwab Advisor Cash Reserves, Schwab YieldPlus Fund, and Schwab YieldPlus Fund Liquidation Trust (collectively, the "Schwab Plaintiffs" or "Plaintiffs") bring this action for relief against the defendants identified below (collectively, "Defendants") arising from Defendants' wrongful suppression of the London InterBank Offered Rate for the U.S. dollar ("USD LIBOR" or "LIBOR"),[1] the reference point for determining interest rates for trillions of dollars in financial instruments, from August 2007 to May 2010 (the "Relevant Period").

2. Plaintiffs assert claims for (i) fraud; (ii) aiding and abetting fraud; (iii) violations of Cal. Bus. & Prof. Code § 17200, *et seq.* (California's Unfair Competition Law); (iv) interference with prospective economic advantage; (v) breach of the implied covenant of good faith and fair dealing; (vi) violations of California's securities laws (Cal. Corp. Code §§ 25400 and 25401); (vii) rescission of contract; (viii) unjust enrichment; (ix) violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 ("Exchange Act"); and (x) violations of Sections 11, 12(a)(2), and 15 of the Securities Act of 1933 ("Securities Act").

3. The Schwab Plaintiffs' claims are made on personal knowledge and on the investigation conducted by, and under the supervision of, Plaintiffs' counsel. That investigation has included reviewing and analyzing information obtained from, among other sources:

(i) analyses by consulting experts engaged by the Schwab Plaintiffs and other plaintiffs in *In re LIBOR-Based Financial Instruments Antitrust Litigation*, Master File No. 1:11-md-2262-NRB (S.D.N.Y.) (the "LIBOR MDL Proceedings"), showing that, contrary to

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[1] While the term "LIBOR" generally encompasses rates with respect to numerous currencies, for convenience the Schwab Plaintiffs use the terms "USD LIBOR" and "LIBOR" interchangeably in this Complaint, unless otherwise indicated.

fundamental principles of economics and finance, during the Relevant Period, USD LIBOR deviated from other well-established benchmarks of Defendants' costs of borrowing, namely (a) those banks' respective probabilities of default and (b) the Federal Reserve Eurodollar Deposit Rate;

(ii) publicly available press releases, news articles, and other media reports (whether disseminated in print or by electronic media) concerning the manipulation of LIBOR during the Relevant Period;

(iii) filings Defendants submitted to the United States Securities and Exchange Commission ("SEC");

(iv) scholarly literature concerning the suppression and manipulation of LIBOR during the Relevant Period;

(v) findings by the United States Department of Justice ("DOJ"), the United States Commodity Futures Trading Commission ("CFTC"), and the United Kingdom's Financial Services Authority ("FSA") issued in June 2012 in connection with settlements with Defendant Barclays Bank PLC ("Barclays"), which detail Barclays' misconduct in making false LIBOR submissions to the British Bankers' Association ("BBA")—the entity responsible for setting LIBOR;[2]

(vi) additional facts that emerged in the wake of the Barclays settlements;

(vii) findings by the DOJ, CFTC, FSA, and the Swiss Financial Market Supervisory Authority ("FINMA") issued in December 2012 in connection with settlements with

[2] The agencies' findings concerning Barclays are contained in: (i) the Statement of Facts incorporated as part of the DOJ's June 26, 2012 non-prosecution agreement with Barclays ("Barclays DOJ Statement"); (ii) the CFTC's Order Instituting Proceedings Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act, as Amended, Making Findings and Imposing Remedial Sanctions, dated June 27, 2012 ("Barclays CFTC Order"); and (iii) the FSA's Final Notice dated June 27, 2012 ("Barclays FSA Final Notice"). The Barclays DOJ Statement and the Barclays FSA Final Notice refer to Barclays Bank PLC. The Barclays CFTC Order refers to that entity as well as Barclays PLC and Barclays Capital Inc. Additionally, the Barclays DOJ Statement states "[t]he parties agree" that the information in it "is true and accurate." *Id.* at 1. It further states "Barclays acknowledges that the wrongful acts taken by the participating employees in furtherance of this misconduct set forth [in the Barclays DOJ Statement] were within the scope of their employment at Barclays" and that "the participating employees intended, at least in part, to benefit Barclays through the actions described [in the Barclays DOJ Statement]." *Id.* ¶ 50.

Defendant UBS AG ("UBS"), which detail UBS's misconduct in making false LIBOR submissions to the BBA;[3]

(viii) findings by the DOJ, CFTC, and FSA issued in February 2013 in connection with settlements with entities affiliated with Defendant The Royal Bank of Scotland Group plc ("RBS"), which detail RBS's misconduct in making false LIBOR submissions to the BBA;[4]

(ix) findings by the DOJ, CFTC, the U.K.'s Financial Conduct Authority ("FCA"), and De Nederlandsche Bank N.V. ("DNB") (the Dutch central bank) issued in October 2013 in connection with settlements with Defendant Coöperatieve Centrale Raiffeisen-Boerenleenbank B.A. ("Rabobank"), which detail Rabobank's misconduct in making false LIBOR submissions to the BBA;[5] and,

(x) findings by the DOJ, CFTC, and FCA issued in July 2014 in connection with settlements with Defendant Lloyds Banking Group PLC ("Lloyds") and affiliated entities, which detail Lloyds' misconduct in making false LIBOR submissions to the BBA.[6]

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[3] The agencies' findings concerning UBS are contained in: (i) the DOJ's Statement of Facts in connection with its December 18, 2012 non-prosecution agreement with UBS ("UBS DOJ Statement"); (ii) the CFTC's Order Instituting Proceedings Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act Making Findings and Imposing Remedial Sanctions, dated December 19, 2012 ("UBS CFTC Order"); (iii) the FSA's Final Notice dated December 19, 2012 ("UBS FSA Final Notice"); and (iv) FINMA's Summary Report dated December 19, 2012 ("UBS FINMA Summary Report"). The UBS DOJ Statement states "[t]he parties agree" that the information in it "is true and accurate." *Id.* at 1.

[4] The agencies' findings concerning RBS are contained in: (i) the DOJ's Statement of Facts in connection with its February 5, 2013 deferred prosecution agreement with The Royal Bank of Scotland plc ("RBS DOJ Statement"); (ii) the CFTC's Order Instituting Proceedings Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act Making Findings and Imposing Remedial Sanctions, dated February 6, 2013 ("RBS CFTC Order"); and (iii) the FSA's Final Notice dated February 6, 2013. The RBS DOJ Statement states RBS "agrees and stipulates" that the information in it "is true and accurate," and RBS "admits, accepts, and acknowledges that it is responsible for the acts of its officers, directors, employees, and agents as set forth [in the RBS DOJ Statement]." *Id.* at 1.

[5] The agency's findings concerning Rabobank are contained in: (i) the DOJ's Statement of Facts in connection with its October 29, 2013 deferred prosecution agreement with Rabobank ("Rabobank DOJ Statement"); (ii) the CFTC's Order Instituting Proceedings Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act Making Findings and Imposing Remedial Sanctions, dated October 29, 2013; (iii) the Final Notice of the U.K.'s Financial Conduct Authority ("FCA") dated October 29, 2013; and (iv) the DNB's findings issued on October 29, 2013. The Rabobank DOJ Statement states "[t]he parties agree" that the information in it "is true and accurate." *Id.* at 1.

[6] The agencies' findings concerning Lloyds are contained in: (i) the DOJ's Statement of Fact in connection with the deferred prosecution agreement entered into between the DOJ and Lloyds filed on

4. Those settlements with government authorities contain admissions and reveal documentary evidence demonstrating a global conspiracy to suppress LIBOR during the Relevant Period.

5. The available facts, considered collectively, demonstrate that Defendants systematically suppressed USD LIBOR during the Relevant Period, so that the interest rates or returns on (i) LIBOR-based floating-rate instruments and (ii) fixed-rate instruments with a remaining maturity of 5-365 days that were affected by LIBOR (collectively, "LIBOR-based financial instruments") were lower than they otherwise would have been absent Defendants' misconduct, and thus the Schwab Plaintiffs did not receive their rightful payments on approximately $665 billion in such instruments purchased during the Relevant Period.[7]

A. <u>Summary of the Factual Allegations</u>

6. Each business day during the Relevant Period, Thomson Reuters calculated USD LIBOR on behalf of the British Bankers' Association ("BBA"). During most of the Relevant Period, the BBA established USD LIBOR based on the rates that 16 major banks, including Defendants, reported as their costs of borrowing. Every day, the banks responded to the BBA's question: "At what rate could you borrow funds, were you to do so by asking for and then accepting inter-bank offers in a reasonable market size just prior to 11 am?" On its website, the BBA explained that "a bank will know what its credit and liquidity risk profile is from rates at which it has dealt and can construct a curve to predict accurately the correct rate for currencies or maturities in which it has not been active." The banks informed the BBA of their costs of borrowing funds at different maturity dates (e.g., one month, three months, six months). The BBA discarded the upper four and lower four quotes and set LIBOR by calculating the mean

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July 28, 2014 in *United States v. Lloyds Banking Group PLC*, No. 3:14 CR 165 (MPS) (D. Conn.) ("Lloyds DOJ Statement"); (ii) the CFTC's Order Instituting Proceedings Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act Making Findings and Imposing Remedial Sanctions, dated July 28, 2014 ("Lloyds CFTC Order"); and (iii) the FCA's Final Notice dated July 28, 2014. The Lloyds DOJ Statement states "[t]he parties agree" that the information in it "is true and accurate." *Id.* at A-1.

[7] The Schwab Plaintiffs have reason to believe that further information supporting their claims is in Defendants' possession, custody, or control, and is not (yet) accessible by Plaintiffs. Among other things, regulators' investigations are ongoing, with additional settlements or criminal actions possible.

value of the remaining middle eight quotes, known as an "inter-quartile" methodology. Thomson Reuters then published LIBOR, also reporting the quotes on which the BBA based its LIBOR calculation.

7. As "the primary benchmark for short term interest rates globally,"[8] LIBOR has occupied (and continues to occupy) a crucial role in the operation of financial markets. For example, market participants commonly set the interest rate on floating-rate notes as a spread against LIBOR (e.g., "LIBOR + [X] bps")[9] and use LIBOR as a basis to determine the appropriate rates of return on short-term fixed-rate notes (by comparing the offered rate to LIBOR). Additionally, the pricing and settlement of Eurodollar futures and options—the most actively traded interest-rate futures contracts on the Chicago Mercantile Exchange—are based on the three-month LIBOR. LIBOR thus affects the pricing of trillions of dollars' worth of financial transactions, rendering it, in the BBA's own words, "the world's most important number."[10]

8. Accordingly, it is well-established among market participants that, as *The Wall Street Journal* has observed, confidence in LIBOR "matters, because the rate system plays a vital role in the economy."[11] Given the vast universe of financial instruments LIBOR impacts, "even a small manipulation" of the rate "could potentially distort capital allocations all over the world."[12]

9. Throughout the Relevant Period, Defendants betrayed investors' confidence in USD LIBOR, as these financial institutions, acting individually and collectively, suppressed LIBOR by underreporting to the BBA the actual interest rates at which Defendants expected they

[8] http://www.bbalibor.com/bbalibor-explained/the-basics.

[9] The term "bps" stands for basis points; 100 basis points equal 1%.

[10] BBA press release, "BBA LIBOR: the world's most important number now tweets daily," May 21, 2009, available at http://www.bbalibor.com/news-releases/bba-libor-the-worlds-most-important-number-now-tweets-daily.

[11] Carrick Mollenkamp and Mark Whitehouse, "Study Casts Doubt on Key Rate --- WSJ Analysis Suggests Banks May Have Reported Flawed Interest Data for Libor," *The Wall Street Journal*, May 29, 2008.

[12] Rosa M. Abrantes-Metz and Albert D. Metz, "How Far Can Screens Go in Distinguishing Explicit from Tacit Collusion? New Evidence from the Libor Setting," *CPI Antitrust Chronicle*, Mar. 2012.

could borrow funds—i.e., their true costs of borrowing—on a daily basis. The BBA then used the false information Defendants provided to set LIBOR. By acting individually and in concert to knowingly understate their true borrowing costs, Defendants caused USD LIBOR to be set artificially low, resulting in artificially suppressed rates of return on LIBOR-based financial instruments.

10. In connection with issuing, offering, and/or selling billions of dollars in LIBOR-based financial instruments purchased by Plaintiffs during the Relevant Period, Defendants made materially false or misleading statements, or misleadingly omitted to state material facts, in two primary ways: (i) by making false USD LIBOR submissions to the BBA continually throughout the Relevant Period; and (ii) by (a) falsely or misleadingly representing, in materials disseminated to Plaintiffs during the Relevant Period in connection with Plaintiffs' purchase of LIBOR-based financial instruments, that the rates of return assigned to those financial instruments were tied or indexed to, or otherwise derived from, a USD LIBOR that reflected the LIBOR panel banks' true costs of borrowing, and/or (b) omitting to state in those materials that the rates of return assigned to the subject financial instruments were tied or indexed to, or otherwise derived from, an improperly suppressed USD LIBOR.[13]

11. Defendants' manipulation depressed returns on numerous types of financial instruments, including notes Defendants issued to raise capital during the Relevant Period. In addition to floating-rate notes, whose interest rates are specifically set as a variable amount over LIBOR, market participants use LIBOR as the starting point for negotiating rates of return on short-term fixed-rate instruments, such as fixed-rate notes maturing in one year or less. Thus, by suppressing LIBOR, Defendants ensured that artificially low interest rates would attach to fixed-rate and variable notes.

[13] *See, e.g.*, *In re LIBOR-Based Fin. Instruments Antitrust Litig.*, 935 F. Supp. 2d 666, 728 (S.D.N.Y. 2013) ("*LIBOR I*" or "Dismissal Order") ("If the offering materials described how LIBOR was calculated by reference to the 'proper' procedures rather than the manipulation that allegedly was occurring, they would contain a material misrepresentation. If they did not describe how LIBOR was calculated, they would still be omitting that LIBOR was being manipulated, surely a material omission.").

12. Defendants caused the Schwab Plaintiffs to receive unlawfully suppressed rates of return with respect to the following categories of LIBOR-based financial instruments purchased by Plaintiffs during the Relevant Period: (i) fixed-rate and floating-rate instruments issued by Defendants; (ii) fixed-rate and floating-rate instruments sold to Plaintiffs directly by Defendants, some of which were also issued by Defendants; (iii) fixed-rate and floating-rate instruments sold to Plaintiffs directly by broker-dealer affiliates or subsidiaries of Defendants; and (iv) fixed-rate and floating-rate instruments issued or sold by other entities ("third parties"), including some instruments issued by Defendants. During the Relevant Period, the Schwab Plaintiffs collectively purchased approximately $665 billion in LIBOR-based financial instruments affected by Defendants' misconduct.

13. Plaintiffs and other investors, who until at least March 15, 2011 had no reason to suspect Defendants' knowing suppression of LIBOR, justifiably believed the financial instruments they were purchasing derived from a rate that was based on USD LIBOR panel members' honest and reasonable assessments of their borrowing costs. To the contrary, Defendants surreptitiously bilked investors of their rightful rates of return on their investments, reaping hundreds of millions, if not billions, of dollars in ill-gotten gains. Moreover, by understating their true borrowing costs, Defendants provided a false or misleading impression of their financial strength to investors and the rest of the market, portraying themselves as economically healthier than they actually were—of particular significance given the market turmoil that occurred during the Relevant Period.

B. <u>Procedural History of the Schwab Plaintiffs' Claims</u>

14. In August 2011, the Schwab Plaintiffs filed three substantially identical actions in the Northern District of California (the "Initial Schwab Actions"), asserting claims arising from Defendants' unlawful suppression of USD LIBOR during the Relevant Period. In September 2011, the Initial Schwab Actions were transferred to this Court for pretrial purposes in accordance with 28 U.S.C. § 1407 (Nos. 11-cv-6409, 11-cv-6411, and 11-cv-6412).

15. The operative complaints in the Initial Schwab Actions, filed in this Court on April 30, 2012, included claims against Defendants for violations of Section 1 of the Sherman Act (15 U.S.C. § 1); the Racketeer Influence and Corrupt Organizations Act ("RICO") (18 U.S.C. §§ 1961, et seq.); California's antitrust statute, the Cartwright Act (Cal. Bus. & Prof. Code §§ 16720, et seq.); and common law claims for interference with economic advantage, breach of the implied covenant of good faith and fair dealing, and unjust enrichment. By its Dismissal Order of March 29, 2013, this Court, *inter alia*, dismissed the Schwab Plaintiffs' federal and state antitrust claims and RICO claims with prejudice, and declined to exercise supplemental jurisdiction over Schwab's common law claims.[14]

16. Following the Court's Dismissal Order, on April 29, 2013, the Schwab Plaintiffs filed this action in California Superior Court, San Francisco County. Defendants removed the action to the Northern District of California and then moved to transfer the case to this Court. On October 2, 2013, the Judicial Panel on Multidistrict Litigation ("JPML") ordered the case transferred to this Court. On December 27, 2013, this Court denied the Schwab Plaintiffs' motion to remand the case back to California Superior Court.[15]

17. The Complaint the Schwab Plaintiffs filed in California Superior Court, as well as this Amended Complaint, assert the common law claims that were included in the Initial Schwab Actions—interference with economic advantage, breach of the implied covenant of good faith and fair dealing, and unjust enrichment—in addition to claims for violations of the Securities Act of 1933 ("Securities Act") and for fraud and violations of California's unfair competition law (Cal. Bus. & Prof. Code § 17200, et seq.) and California's securities laws (Cal. Corp. Code §§ 25400 and 25401).[16] This Amended Complaint also includes claims under the Exchange Act.

[14] *See LIBOR I*, 935 F. Supp. 2d at 685-95, 724-36.

[15] *See Salix Capital US, Inc. v. Bank of Am. Sec., LLC*, Nos. 13 Civ. 4018 (NRB), 13 Civ. 7005 (NRB), 13 Civ. 2297 (NRB), 2013 U.S. Dist. LEXIS 181158 (S.D.N.Y. Dec. 27, 2013) ("Remand Order") (denying motions to remand by the Schwab Plaintiffs and others).

[16] In its Remand Order, the Court held that the Schwab Plaintiffs' Securities Act claims were time-barred by the three-year time limitation in Section 13 of the Securities Act, as interpreted by the Second Circuit in *Police & Fire Retirement System of Detroit v. IndyMac MBS, Inc.*, 721 F.3d 95 (2d Cir. 2013), *cert. dismissed sub nom.*, *Pub. Emps.' Ret. Sys. of Miss. v. IndyMac MBS, Inc.*, No. 13-640, 2014 U.S. LEXIS 4893, at *1 (Sept. 29, 2014). *See Salix Capital*, 2013 U.S. Dist. LEXIS 181158, at *36-37. In so ruling,

The Schwab Plaintiffs' claims are asserted against Defendants individually and as co-conspirators under state civil conspiracy law.

18. Plaintiffs do not replead in this Amended Complaint the antitrust or RICO claims that were asserted in the Initial Schwab Actions and dismissed pursuant to the Court's Dismissal Order. The Schwab Plaintiffs do, however, intend to appeal the Dismissal Order to the Second Circuit Court of Appeals when permitted to do so by this Court or the Second Circuit.

II. JURISDICTION AND VENUE

19. This Court has jurisdiction over the subject matter of this action pursuant to Section 27 of the Exchange Act (15 U.S.C. § 78aa), Section 22 of the Securities Act (15 U.S.C. § 77(v)), and 28 U.S.C. § 1331, because this is a civil action arising under the laws of the United States. Further, because this action arises under acts of Congress that regulate commerce, this Court also has jurisdiction pursuant to 28 U.S.C. § 1337. This Court has subject matter jurisdiction over the state law claims under 28 U.S.C. § 1367 because all of the claims arise from the same facts and circumstances and form part of the same case or controversy. Additionally, in its Remand Order, this Court ruled that it has subject matter jurisdiction over the Schwab Plaintiffs' claims pursuant to 12 U.S.C. § 632 (the Edge Act) and 28 U.S.C. §§ 1330, 1441, and 1603 (the Foreign Sovereign Immunities Act).[17]

20. This Court has personal jurisdiction over all Defendants by virtue of their business activities in this jurisdiction. Defendants all transacted business and derived substantial revenue from that business within New York and this District. Most, if not all, Defendants have offices located in New York and/or have engaged in regular and continuous course of business in New York. Some Defendants are resident corporations of New York, with their headquarters or primary place of business located within the state. Furthermore, all Defendants acted as co-conspirators with each other. Defendants therefore purposely availed themselves of the privilege

the Court did not address the Schwab Plaintiffs' argument that the three-year period was tolled as a result of Plaintiffs' having asserted Securities Act claims in the initial complaints filed in the Initial Schwab Actions. *See* Tr. of Dec. 4, 2013 Hr'g (Dkt. No. 63 in Case No. 13 CV 4018 (NRB)), at 22:10-23:2, 24:15-30:23. Plaintiffs therefore include their Securities Act claims in this Amended Complaint.

[17] *See Salix Capital*, 2013 U.S. Dist. LEXIS 181158, at *17-37.

of conducting activities in New York, including in the Southern District of New York, in connection with the wrongful activities described in this Complaint.

21. As alleged above, this action was originally filed in the Superior Court of California, San Francisco County, and was removed by Defendants to the Northern District of California before being transferred to this Court by the JPML as part of the LIBOR MDL Proceedings. State and federal courts in California, including in San Francisco County and the Northern District of California, have personal jurisdiction over Defendants by virtue of their general business activities in California, and because Defendants offered, issued, and/or sold, or controlled individuals or entities that offered, issued, and/or sold, LIBOR-based financial instruments to the Schwab Plaintiffs and others in that state, county, and District, and because violations of law alleged in this Complaint, including the making of material false and misleading statements, occurred in that state, county, and District. Among other things, all of the Schwab Plaintiffs' purchases of LIBOR-based financial instruments during the Relevant Period were made through Schwab's trading desk in San Francisco, California, within the Northern District of California. Further, Defendants are sophisticated market participants that knew, or reasonably should have known, that their misconduct in causing LIBOR—the reference point for trillions of dollars of financial instruments around the world—to be artificially suppressed during the Relevant Period would produce substantial and foreseeable effects in the United States and in the Northern District of California.

22. Venue is proper in this District pursuant to Section 27 of the Exchange Act (15 U.S.C. § 78aa), Section 22 of the Securities Act (15 U.S.C. § 77(v)), and 28 U.S.C. § 1391. Each Defendant transacted business in the District and a substantial part of the events or omissions giving rise to the Schwab Plaintiffs' claims occurred in this District. Many of the acts and transactions constituting violations of law complained of in this Amended Complaint, including the making or dissemination of false or misleading statements of material fact to the Schwab Plaintiffs and others, occurred in this District. Venue is also proper in this District given that this case was transferred here by order of the JPML.

23. Venue was, and would continue to be, proper in California, including in San Francisco County and the Northern District of California, pursuant to Section 27 of the Exchange Act (15 U.S.C. § 78aa), Section 22 of the Securities Act (15 U.S.C. § 77(v)), and 28 U.S.C. § 1391. Among other things, Defendants offered, issued, and/or sold, or controlled individuals or entities that offered, issued, and/or sold, LIBOR-based financial instruments to the Schwab Plaintiffs and others in that state, county, and District, and because violations of law alleged in this Amended Complaint, including the making or dissemination of false or misleading statements of material fact to the Schwab Plaintiffs and others, occurred in that state, county, and District.

24. In connection with the acts alleged in this Complaint, Defendants, directly or indirectly, used the means and instrumentalities of interstate commerce, including the U.S. mails and interstate telephone communications.

III. THE PARTIES

Plaintiffs

25. Plaintiff The Charles Schwab Corporation is a corporation organized under the laws of Delaware, with its principal place of business in San Francisco, California. The Charles Schwab Corporation purchased or held LIBOR-based financial instruments during the Relevant Period and has been damaged by Defendants' misconduct.

26. Plaintiff Charles Schwab Bank, N.A. is a national banking association organized under the laws of Arizona and headquartered in Reno, Nevada. It is a wholly-owned subsidiary of The Charles Schwab Corporation. Charles Schwab Bank, N.A. purchased or held LIBOR-based financial instruments during the Relevant Period and has been damaged by Defendants' misconduct.

27. Plaintiff Charles Schwab & Co., Inc. is a California Corporation and a wholly-owned subsidiary of The Charles Schwab Corporation. Charles Schwab & Co., Inc., through its division Charles Schwab Treasury, manages the investments of Charles Schwab Bank, N.A.

Charles Schwab & Co., Inc. purchased or held LIBOR-based financial instruments during the Relevant Period and has been damaged by Defendants' misconduct.

28. Plaintiff Schwab Short-Term Bond Market Fund is a series of Schwab Investments, an open-end management investment company organized under Massachusetts law on October 26, 1990. Schwab Short-Term Bond Market Fund purchased or held LIBOR-based financial instruments during the Relevant Period and has been damaged by Defendants' misconduct.

29. Plaintiff Schwab Total Bond Market Fund is also a series of Schwab Investments. Schwab Total Bond Market Fund purchased or held LIBOR-based financial instruments during the Relevant Period and has been damaged by Defendants' misconduct.

30. Plaintiff Schwab U.S. Dollar Liquid Assets Fund, managed in San Francisco, California, is a series of Charles Schwab Worldwide Funds plc, an investment company with variable capital that was incorporated in Ireland as a public limited company on February 8, 1999. Schwab U.S. Dollar Liquid Assets Fund purchased or held LIBOR-based financial instruments during the Relevant Period and has been damaged by Defendants' misconduct.

31. Plaintiff Schwab Money Market Fund is a series of The Charles Schwab Family of Funds, an open-end investment management company organized as a Massachusetts business trust on October 20, 1989. Schwab Money Market Fund purchased or held LIBOR-based financial instruments during the Relevant Period and has been damaged by Defendants' misconduct.

32. Plaintiff Schwab Value Advantage Money Fund is a series of The Charles Schwab Family of Funds. Schwab Value Advantage Money Fund purchased or held LIBOR-based financial instruments during the Relevant Period and has been damaged by Defendants' misconduct.

33. Plaintiff Schwab Retirement Advantage Money Fund is a series of The Charles Schwab Family of Funds. Schwab Retirement Advantage Money Fund purchased or held

LIBOR-based financial instruments during the Relevant Period and has been damaged by Defendants' misconduct.

34. Plaintiff Schwab Investor Money Fund is a series of The Charles Schwab Family of Funds. Schwab Investor Money Fund purchased or held LIBOR-based financial instruments during the Relevant Period and has been damaged by Defendants' misconduct.

35. Plaintiff Schwab Cash Reserves is a series of The Charles Schwab Family of Funds. Schwab Cash Reserves purchased or held LIBOR-based financial instruments during the Relevant Period and has been damaged by Defendants' misconduct.

36. Plaintiff Schwab Advisor Cash Reserves is a series of The Charles Schwab Family of Funds. Schwab Advisor Cash Reserves purchased or held LIBOR-based financial instruments during the Relevant Period and has been damaged by Defendants' misconduct.

37. Plaintiff Schwab YieldPlus Fund is a series of Schwab Investments, an open-end investment management company organized as a Massachusetts business trust on October 26, 1990. Contingent interests of Schwab YieldPlus Fund have passed to Plaintiff Schwab YieldPlus Fund Liquidation Trust. Schwab YieldPlus Fund purchased or held LIBOR-based financial instruments during the Relevant Period and has been damaged by Defendants' misconduct.

Defendants

38. Defendant Bank of America Corporation is a Delaware corporation headquartered in Charlotte, North Carolina. Defendant Bank of America, N.A., a federally-chartered national banking association headquartered in Charlotte, North Carolina, is an indirect, wholly-owned subsidiary of Defendant Bank of America Corporation. Defendants Bank of America Corporation and Bank of America, N.A. are referenced collectively in this Complaint as "Bank of America." Bank of America was at all relevant times a member of the BBA USD LIBOR panel. Bank of America operated in the United States directly or through its wholly-owned and/or controlled subsidiaries, affiliates, agents, and predecessors. Bank of America, both directly and through its subsidiaries, affiliates, agents, or predecessors, participated in the wrongful conduct alleged in this Amended Complaint.

39. Defendant Bank of Tokyo-Mitsubishi UFJ Ltd. ("Bank of Tokyo") is a Japanese subsidiary of Mitsubishi Financial Group, Inc., and is headquartered in Tokyo, Japan, with an office in New York. Bank of Tokyo was at all relevant times a member of the BBA USD LIBOR panel. Bank of Tokyo operated in the United States directly and through its wholly-owned and/or controlled subsidiaries, affiliates, agents, and predecessors. Bank of Tokyo, both directly and through its subsidiaries, affiliates, agents, or predecessors, participated in the wrongful conduct alleged in this Amended Complaint.

40. Defendant Barclays Bank plc (as noted above, "Barclays") is a British public limited company headquartered in London, England, with offices in New York. Barclays was at all relevant times a member of the BBA USD LIBOR panel. Barclays operated in the United States directly and through its wholly-owned and/or controlled subsidiaries, affiliates, agents, and predecessors. Barclays, both directly and through its subsidiaries, affiliates, agents, or predecessors, participated in the wrongful conduct alleged in this Amended Complaint.

41. Defendant Citigroup, Inc. is a Delaware corporation headquartered in New York, New York. Defendant Citibank, N.A., a federally-chartered national banking association headquartered in New York, New York, is a wholly-owned subsidiary of Defendant Citigroup, Inc. Defendants Citigroup, Inc. and Citibank, N.A. are referenced collectively in this Complaint as "Citibank." Citibank was at all relevant times a member of the BBA USD LIBOR panel. Citibank operated in the United States directly and through its wholly-owned and/or controlled subsidiaries, affiliates, agents, and predecessors. Citibank, both directly and through its subsidiaries, affiliates, agents, or predecessors, participated in the wrongful conduct alleged in this Amended Complaint.

42. Defendant Coöperatieve Centrale Raiffeisen-Boerenleenbank B.A. (as noted above, "Rabobank") is a financial services provider headquartered in Utrecht, the Netherlands, with an office in New York. Rabobank was at all relevant times a member of the BBA USD LIBOR panel. Rabobank operated in the United States directly and through its wholly-owned and/or controlled subsidiaries, affiliates, agents, and predecessors. Rabobank, both directly and

through its subsidiaries, affiliates, agents, or predecessors, participated in the wrongful conduct alleged in this Amended Complaint.

43. Defendant Credit Suisse Group AG ("Credit Suisse") is a Swiss company headquartered in Zurich, Switzerland. Credit Suisse was at all relevant times a member of the BBA USD LIBOR panel. Credit Suisse operated in the United States directly and through its wholly-owned and/or controlled subsidiaries, affiliates, agents, and predecessors. Credit Suisse, both directly and through its subsidiaries, affiliates, agents, or predecessors, participated in the wrongful conduct alleged in this Amended Complaint.

44. Defendant Deutsche Bank AG ("Deutsche Bank") is a German financial services company headquartered in Frankfurt, Germany, with offices in New York. Deutsche Bank was at all relevant times a member of the BBA USD LIBOR panel. Deutsche Bank operated in the United States directly and through its wholly-owned and/or controlled subsidiaries, affiliates, agents, and predecessors. Deutsche Bank, both directly and through its subsidiaries, affiliates, agents, or predecessors, participated in the wrongful conduct alleged in this Amended Complaint.

45. Defendant HSBC Holdings plc is a British public limited company headquartered in London, England. Defendant HSBC Bank plc, a British public limited company headquartered in London, England, is a wholly-owned subsidiary of Defendant HSBC Holdings plc. Defendants HSBC Holdings plc and HSBC Bank plc are referenced collectively in this Complaint as "HSBC." HSBC Holdings plc was at all relevant times a member of the BBA USD LIBOR panel. HSBC operated in the United States directly and through its wholly-owned and/or controlled subsidiaries, affiliates, agents, and predecessors. HSBC, both directly and through its subsidiaries, affiliates, agents, or predecessors, participated in the wrongful conduct alleged in this Amended Complaint.

46. Defendant JPMorgan Chase & Co. is a Delaware corporation headquartered in New York, New York. Defendant JPMorgan Chase Bank, National Association, a federally-chartered national banking association headquartered in New York, New York, is a wholly-

owned subsidiary of Defendant JPMorgan Chase & Co. Defendants JPMorgan Chase & Co. and JPMorgan Chase Bank, National Association are referenced collectively in this Complaint as "JPMorgan Chase." JPMorgan Chase was at all relevant times a member of the BBA USD LIBOR panel. JPMorgan Chase operated in the United States directly and through its wholly-owned and/or controlled subsidiaries, affiliates, agents, and predecessors. JPMorgan Chase, both directly and through its subsidiaries, affiliates, agents, or predecessors, participated in the wrongful conduct alleged in this Amended Complaint.

47. Defendant Lloyds Banking Group plc (as noted above, "Lloyds") is a British public limited company headquartered in London, England, with an office in New York. Defendant Lloyds was formed in 2009 through the acquisition of Defendant HBOS plc ("HBOS"), a British banking and insurance company headquartered in Edinburgh, Scotland, by Lloyds TSB Bank plc. Prior to 2009, HBOS and Lloyds TSB Bank plc were members of the BBA USD LIBOR panel. Lloyds joined the BBA USD LIBOR panel upon Lloyds' formation in 2009. Lloyds operated in the United States directly or its though its wholly-owned and/or controlled subsidiaries, affiliates, agents, and predecessors. Lloyds, both directly and through its subsidiaries, affiliates, agents, or predecessors, participated in the wrongful conduct alleged in this Amended Complaint.

48. Defendant Royal Bank of Canada ("RBC") is a Canadian company headquartered in Toronto, Canada, with affiliates in New York. RBC was at all relevant times a member of the BBA USD LIBOR panel. RBC operated in the United States directly and through its wholly-owned and/or controlled subsidiaries, affiliates, agents, and predecessors. RBC, both directly and through its subsidiaries, affiliates, agents, or predecessors, participated in the wrongful conduct alleged in this Amended Complaint.

49. Defendant The Norinchukin Bank ("Norinchukin") is a Japanese cooperative bank headquartered in Tokyo, Japan, with an office in New York. Norinchukin was at all relevant times a member of the BBA USD LIBOR panel. Norinchukin operated in the United States directly and through its wholly-owned and/or controlled subsidiaries, affiliates, agents,

and predecessors. Norinchukin, both directly and through its subsidiaries, affiliates, agents, or predecessors, participated in the wrongful conduct alleged in this Amended Complaint.

50. Defendant The Royal Bank of Scotland Group plc (as noted above, "RBS") is a British public limited company headquartered in Edinburgh, Scotland, with an office in New York. RBS was at all relevant times a member of the BBA USD LIBOR panel. RBS operated in the United States directly and through its wholly-owned and/or controlled subsidiaries, affiliates, agents, and predecessors. RBS, both directly and through its subsidiaries, affiliates, agents, or predecessors, participated in the wrongful conduct alleged in this Amended Complaint.

51. Defendant UBS AG (as noted above, "UBS") is a Swiss company based in Basel and Zurich, Switzerland, with an office in New York. UBS was at all relevant times a member of the BBA USD LIBOR panel. UBS operated in the United States directly and through its wholly-owned and/or controlled subsidiaries, affiliates, agents, and predecessors. UBS, both directly and through its subsidiaries, affiliates, agents, or predecessors, participated in the wrongful conduct alleged in this Amended Complaint.

52. Defendant Portigon AG was, during the Relevant Period, known as WestLB AG, a German joint stock company headquartered in Düsseldorf, Germany. The European Commission approved a restructuring plan for WestLB AG on December 20, 2011, and WestLB AG became Portigon AG on July 2, 2012. Portigon AG states on its website, "The internationally operating service provider Portigon is the same legal entity as the former WestLB."[18] Defendant Westdeutsche ImmobilienBank AG, a German company headquartered in Mainz, Germany, was a wholly-owned subsidiary of WestLB AG during the Relevant Period and is now a wholly-owned subsidiary of Erste Abwicklungsanstalt, based in Düsseldorf. Defendants Portigon AG (f/k/a WestLB AG) and Westdeutsche ImmobilienBank AG are referenced collectively in this Complaint as "WestLB." Prior to 2009, WestLB AG was a member of the BBA USD LIBOR Panel. Portigon joined the BBA USD LIBOR Panel after acquiring WestLB AG. WestLB operated in the United States directly or through its wholly-

[18] *See* http://www.portigon.com/cm/content/portigon/i/en/ueber-portigon/westlb-archiv.html.

owned and/or controlled subsidiaries, affiliates, agents, predecessors, and successors. WestLB, both directly and through its subsidiaries, affiliates, agents, predecessors, or successors, participated in the wrongful conduct alleged in this Amended Complaint.

53. Defendants are sued herein in their individual capacities and as co-conspirators of one another under state law, and as aiders and abettors of each other's wrongful conduct under state law.

IV. FACTUAL ALLEGATIONS

A. The Creation of LIBOR

54. The BBA is a trade association based in the United Kingdom. Throughout the Relevant Period, the BBA owned LIBOR. The BBA is governed by a board, which, during the Relevant Period, officially met four times per year, and was comprised of the BBA's chief executive and chief executives of Defendants. BBA Enterprises Ltd., located in London, is a wholly-owned subsidiary of the BBA. In 2010, the BBA incorporated a new legal subsidiary, BBA LIBOR Ltd., to govern LIBOR.

55. The BBA created LIBOR in 1986 as a tool to help its member banks set interest rates on large corporate loans issued by the banks. Based on the BBA's representations regarding LIBOR's asserted "objectivity and accuracy," LIBOR developed into the primary benchmark for short-term interest rates globally and, during the Relevant Period, served as a critical reference point for trillions of dollars in financial instruments, including the notes purchased and held by the Schwab Plaintiffs during the Relevant Period.[19] Financial institutions around the world, including the Schwab Plaintiffs, reasonably relied on LIBOR as an honest and accurate benchmark of a competitively determined interbank lending rate.

B. The Calculation of LIBOR

56. As noted above, on each business day during the Relevant Period, Thomson Reuters calculated and disseminated LIBOR for different ranges of maturity, from overnight to

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[19] *See* Carrick Mollenkamp and Mark Whitehouse, "Study Casts Doubt on Key Rate --- WSJ Analysis Suggests Banks May Have Reported Flawed Interest Data for Libor," *The Wall Street Journal*, May 29, 2008.

one year, on behalf of the BBA. During most of the Relevant Period, the BBA established USD LIBOR based on the rates that 16 major banks, including Defendants, reported as their costs of borrowing; the banks informed the BBA of their costs of borrowing funds at different maturity dates (e.g., one month, three months, six months, twelve months). Specifically, every day, Defendants responded to the BBA's question: "At what rate could you borrow funds, were you to do so by asking for and then accepting inter-bank offers in a reasonable market size just prior to 11 am?" The BBA discarded the upper four and lower four quotes and set LIBOR by calculating the mean value of the remaining middle eight quotes, known as an "inter-quartile" methodology. Thomson Reuters then published LIBOR, also reporting the quotes on which the BBA based its LIBOR calculation.

57. LIBOR has occupied a crucial role in the operation of financial markets. LIBOR is "intended to be a barometer to measure strain in money markets and is often a gauge of the market's expectation of future central bank interest rates."[20]

58. Market participants commonly set the interest rate on floating-rate instruments as a spread against LIBOR (e.g., "LIBOR + [X] bps") and use LIBOR as a basis to determine the appropriate rate of return on short-term fixed-rate instruments (by comparing the offered rate to LIBOR). Additionally, the pricing and settlement of Eurodollar futures and options—the most actively traded interest-rate futures contracts on the Chicago Mercantile Exchange—are based on the three-month LIBOR.

59. It is well-established among market participants that, as *The Wall Street Journal* has observed, confidence in LIBOR "matters, because the rate system plays a vital role in the economy."[21] Given the vast universe of financial instruments LIBOR impacts, "even a small manipulation" of the rate "could potentially distort capital allocations all over the world."[22]

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[20] UBS CFTC Order at 6.

[21] Carrick Mollenkamp and Mark Whitehouse, "Study Casts Doubt on Key Rate --- WSJ Analysis Suggests Banks May Have Reported Flawed Interest Data for Libor," *The Wall Street Journal*, May 29, 2008.

[22] Rosa M. Abrantes-Metz and Albert D. Metz, "How Far Can Screens Go in Distinguishing Explicit from Tacit Collusion? New Evidence from the Libor Setting," *CPI Antitrust Chronicle*, Mar. 2012.

60. According to an August 10, 2007 BBA press release, LIBOR "closely reflected the real rates of interest being used by the world's large banks, and it reflected the actual rates at which banks borrowed money from each other."[23] Because a bank's daily LIBOR submissions "should correspond to the cost at which the bank perceives that it can borrow funds in the relevant market," those submissions "may be viewed as an indicator of a bank's creditworthiness."[24] In that regard, "[i]f a bank's LIBOR contributions are relatively high, those submissions could suggest that the bank is paying more than others to borrow funds," thus the bank "could be perceived to be experiencing financial difficulties because lenders were charging higher rates to that bank."[25]

61. During the Relevant Period, the BBA mandated that "each Contributor Panel bank must submit its rate without reference to rates contributed by other Contributor Panel banks."[26]

62. Despite the financial meltdown of 2007-2008, Defendants, which served as members of the BBA's USD LIBOR panel during that period, "were nonetheless required to adhere to the benchmark definition and criteria and submit rates based on their evaluation of the costs of borrowing unsecured funds in the interbank markets, namely, for LIBOR, the London interbank market."[27] The definitions and criteria regarding LIBOR "did not permit panel banks to base their submissions, in whole or in part, on a bank's desire to avoid negative media attention or reputational harm."[28]

63. Eschewing those obligations throughout the Relevant Period, Defendants betrayed investors' confidence in LIBOR, as these financial institutions suppressed USD LIBOR by underreporting to the BBA the actual rates at which the Defendants expected they could borrow funds—i.e., their true costs of borrowing—on a daily basis. The BBA then relied on the false

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[23] *Id.* ¶ 98.

[24] UBS DOJ Statement ¶ 99.

[25] *Id.*

[26] *Id.* ¶ 7.

[27] UBS CFTC Order at 42.

[28] *Id.*

information Defendants provided to set LIBOR. By knowingly acting to understate their true borrowing costs, Defendants caused LIBOR to be set artificially low during the Relevant Period.

C. Defendants' Fraudulent and Collusive Conduct In Suppressing USD LIBOR

1. Defendants Possessed Strong Motives to Suppress LIBOR.

64. Defendants each had substantial financial incentives to suppress LIBOR. First, Defendants were motivated, particularly given investors' serious concerns over the stability of the market in the wake of the financial crisis that emerged in 2007, to understate their borrowing costs and thus the level of risk associated with the banks. Moreover, because no one bank would want to stand out as bearing a higher degree of risk than its fellow banks, each Defendant shared a powerful incentive to collude with its co-Defendants to ensure it was not the "odd man out."

65. Second, by artificially suppressing LIBOR, Defendants paid lower interest rates on LIBOR-based financial instruments they sold to investors, including the Schwab Plaintiffs, during the Relevant Period. Illustrating Defendants' motive to artificially depress LIBOR, in 2009 Citibank reported it would make $936 million in net interest revenue if rates would fall by 25 bps per quarter over the next year, and $1.935 billion if they fell 1% instantaneously. JPMorgan Chase likewise reported significant exposure to interest rates in 2009: The bank stated that if interest rates increased by 1%, it would lose over $500 million. HSBC and Lloyds also estimated they would earn hundreds of millions of additional dollars in 2008-2009 in response to lower interest rates and would lose comparable amounts in response to higher rates. These banks collectively earned billions of dollars in net interest revenues during the Relevant Period.

66. Defendants thus possessed reputational and financial incentives to manipulate LIBOR—which, as further detailed below, they did.

2. Independent Analyses by Consulting Experts Engaged by the Schwab Plaintiffs and Others Demonstrate that Defendants Artificially Suppressed LIBOR During the Relevant Period.

67. Consulting experts engaged by the Schwab Plaintiffs and other plaintiffs in the LIBOR MDL Proceedings compared USD LIBOR with other recognized benchmarks for

determining Defendants' borrowing costs. Employing well-reasoned methodologies, these consultants provided analyses showing that Defendants artificially suppressed LIBOR during the Relevant Period, as LIBOR did not appropriately correspond with other measures of Defendants' borrowing costs. Specifically, the consulting experts detailed (i) the difference between Defendants' respective LIBOR quotes and their probabilities of default (which measure the banks' respective levels of credit risk); and (ii) the spread between LIBOR and the Federal Reserve Eurodollar Deposit Rate.

a. <u>"Probability of Default" Analysis</u>

68. Assessing the likelihood that USD LIBOR was suppressed during the Relevant Period, expert consultants retained by the Schwab Plaintiffs in the LIBOR MDL Proceedings compared USD LIBOR panel members' quotes from 2007 through 2008 to the daily default probability estimates for each of those banks as determined, and updated daily for each maturity (term), by Kamakura Risk Information Services ("KRIS").[29] The study focused on identifying any periods of severe discrepancy between each bank's probabilities of default ("PD") and the LIBOR quotes the bank submitted to the BBA.

69. The KRIS reduced-form model estimates each bank's default risk on a daily basis by analyzing each bank's equity and bond prices, accounting information, and general economic conditions, such as the level of interest rates, unemployment rates, inflation rates, etc. On its website, KRIS states it "provides a full term structure of default for both corporate and sovereign credit names based upon a multiple models approach" and its default probabilities "are updated daily and cover more than 30,000 companies in 37 countries."[30]

70. PD provides a measure of a bank's credit (default) risk exposure, essentially the likelihood that the bank will default within a specified time period. PD can be estimated using statistical models, whereas LIBOR is a rate of return required by investors lending short-term

[29] KRIS did not have PD for Defendants WestLB (n/k/a Portigon AG), Rabobank, or Norinchukin, because those companies were not publicly traded. This PD analysis therefore does not include those banks.

[30] *See* http://www.kris-online.com/.

funds to the bank. A finding of a statistically significant negative correlation coefficient between daily USD LIBOR quotes and PD for a given bank over a given term period violates the fundamental relationship between risk and return: Investors require a higher rate of return as a premium for taking on additional risk exposure, resulting in a positive relationship (correlation) between risk and return. An increase in the bank's PD indicates that the risk of default has increased, thereby causing investors to require a higher rate of return for loans to the bank, which should correspond with a higher LIBOR quote.

71. Accordingly, a finding of a statistically significant negative coefficient (of any size) between a bank's daily LIBOR quotes and its PD shows that increases in PD correspond with decreases in LIBOR quotes, which violates fundamental finance theory. This would indicate that banks are suppressing their LIBOR quotes to avoid revealing the higher rates that reflect their true (higher) PD. In other words, any finding of negative, statistically significant correlation coefficients between a bank's PD and its LIBOR quotes suggests LIBOR suppression by the bank over the analysis period.

72. The magnitude of the correlation coefficient is impacted by the volatility of both PD and LIBOR for each bank during the time period. Thus, for example, if a bank has high volatility in its PD, the absolute value of the correlation coefficient will tend to be lower (i.e., less negative) as compared to an identical bank with low PD volatility. However, both may be equally engaged in LIBOR suppression if their correlation coefficients are statistically significant and negative.

73. The consulting experts used the KRIS database to test whether, for the period under study, each bank's daily sealed LIBOR quote correlated with the bank's estimated PD that day for the same maturity term (provided by KRIS). For example, the consultants examined the correlation between Bank of America's sealed quote for three-month LIBOR on each date with the three-month PD for Bank of America, as provided by the KRIS database on that same day. As explained above, standard finance theory implies that a positive correlation between a bank's PD and its LIBOR quote should exist—i.e., as the bank's default risk (PD) increases, its

borrowing rate (LIBOR quote) should increase, and vice versa. That is, using the above example, standard finance theory predicts a positive correlation between Bank of America's three-month PD and its three-month LIBOR quote. A finding of either a zero or negative correlation between a bank's PD and its LIBOR quote indicates the latter does not reflect the bank's default-risk probability, which indicates LIBOR suppression. A negative correlation means the two values have an inverse relationship; as one goes up, the other tends to go down. A statistically significant negative correlation between a bank's LIBOR quote and its PD is consistent with the bank's reducing its LIBOR quote in order to mask its higher risk exposure during a period of financial crisis, such as during the 2007-2008 period. By submitting an artificially low LIBOR quote, the bank sends a false signal that it is less risky than it truly is.

74. The consulting experts found suppression over the 2007-2008 period for one-month, three-month, six-month, and 12-month LIBOR.

75. The LIBOR quotes for all the reporting banks (except HSBC) during 2007 were negatively correlated with their daily updated PD (for the same maturity term) to a statistically significant degree. For example, the correlation between Bank of America's daily LIBOR quotes and its daily PD was negative and statistically significant at a very high level for the one-month, three-month, six-month, and 12-month terms, i.e., between -0.5857 and -0.6093.[31] In other words, the data indicate that, contrary to finance theory, the higher a panel bank's PD, the lower its LIBOR quote.

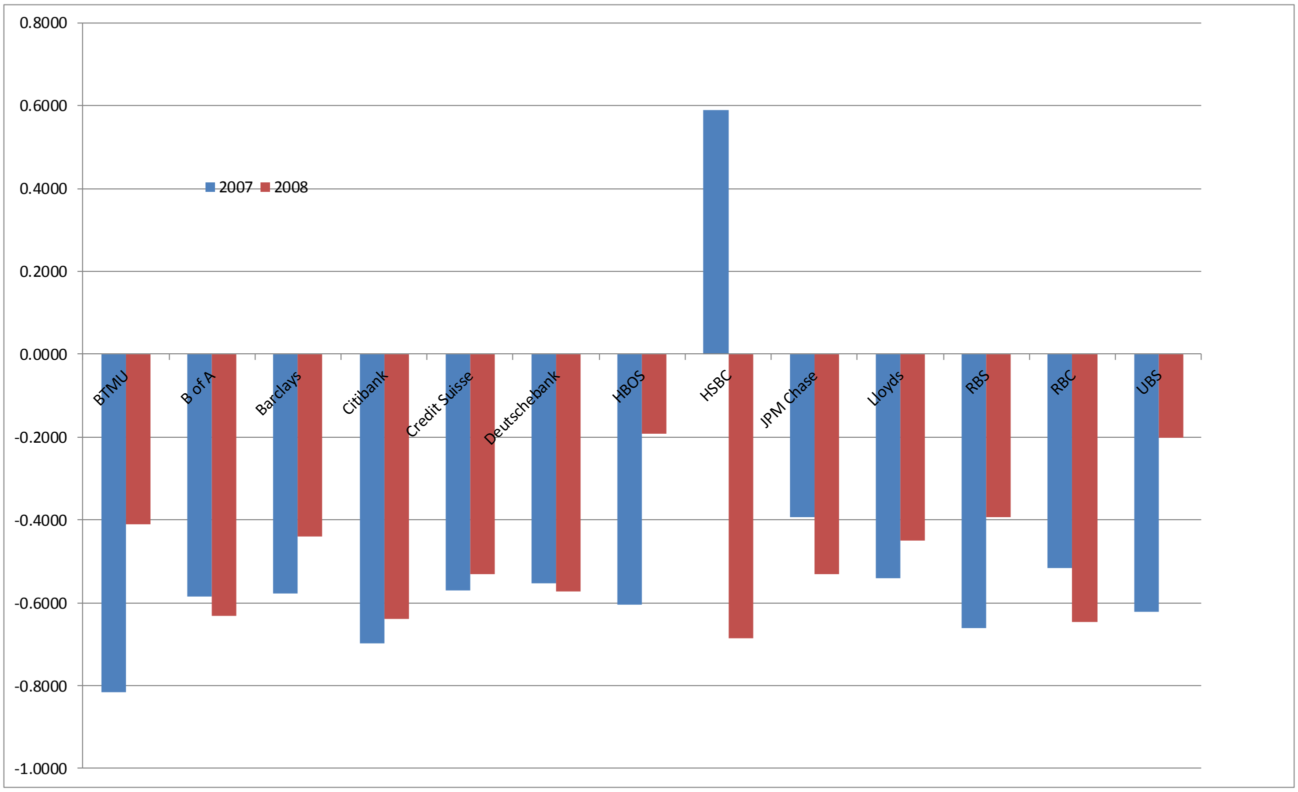
76. Performing the same analysis with respect to Defendants' daily LIBOR quotes and PD during 2008, the expert consultants found that for all of the banks, the submitted LIBOR quotes were negatively correlated with their PD at the one-month and three-month maturities. Indeed, all of the banks were submitting unduly low LIBOR quotes at all maturities during the time period from August 9, 2007 until September 12, 2008, and, with only one exception, from September 15 through December 31, 2008 (the period following the Lehman bankruptcy).

[31] Correlation coefficients range from a value of -1 to 1. A correlation coefficient of -0.50, for example, would imply that a 1% increase in PD would result in a 50-basis point decline in the bank's LIBOR quote.

77. The following graphs illustrate the findings of this expert analysis—which demonstrates a striking negative correlation between Defendants' USD LIBOR quotes and PD during 2007 and 2008, indicating they severely depressed USD LIBOR during that time.

<u>Graph 1</u>

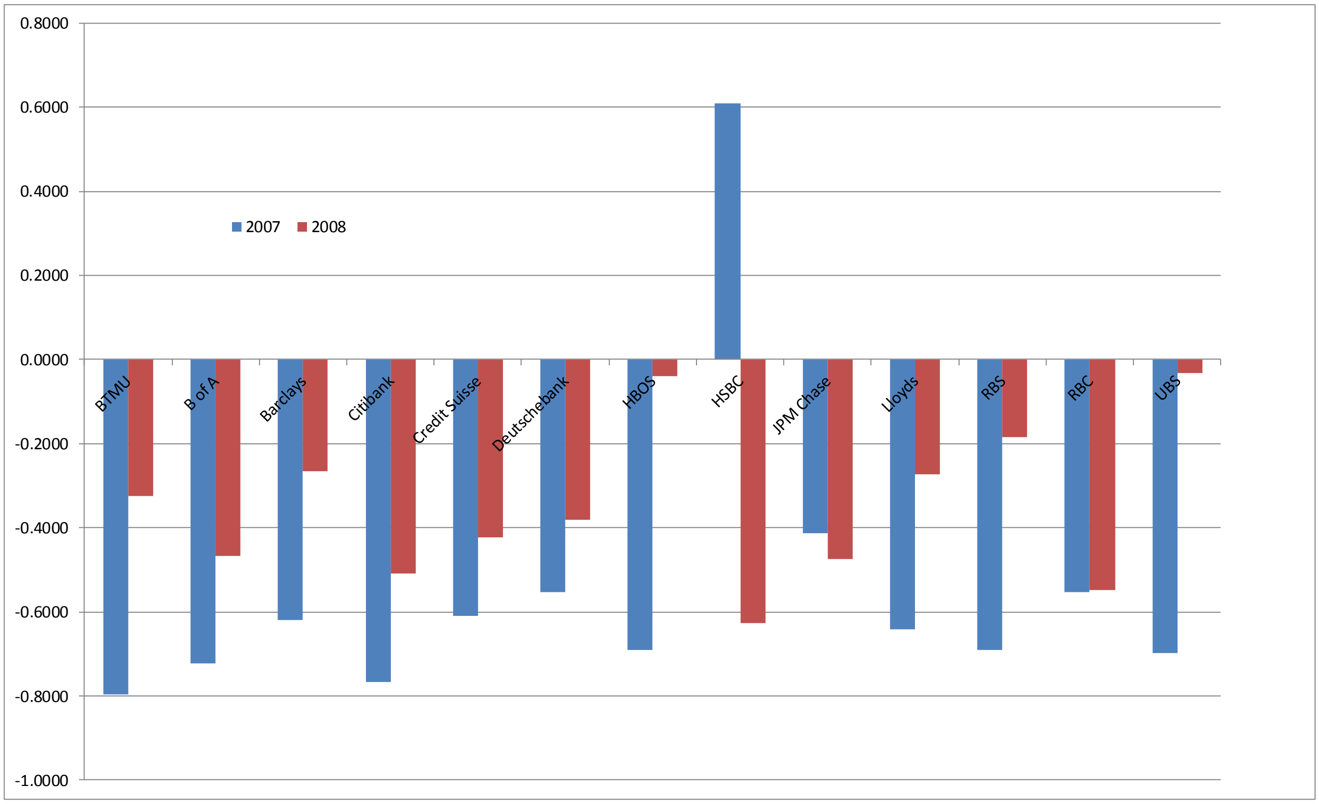
Correlation Coefficients
Between Each Bank's Daily USD LIBOR Bid and Probability of Default (PD)
One-Month Term



(Note: PD are estimated daily using the reduced form model of Kamakura Risk Information Services.)

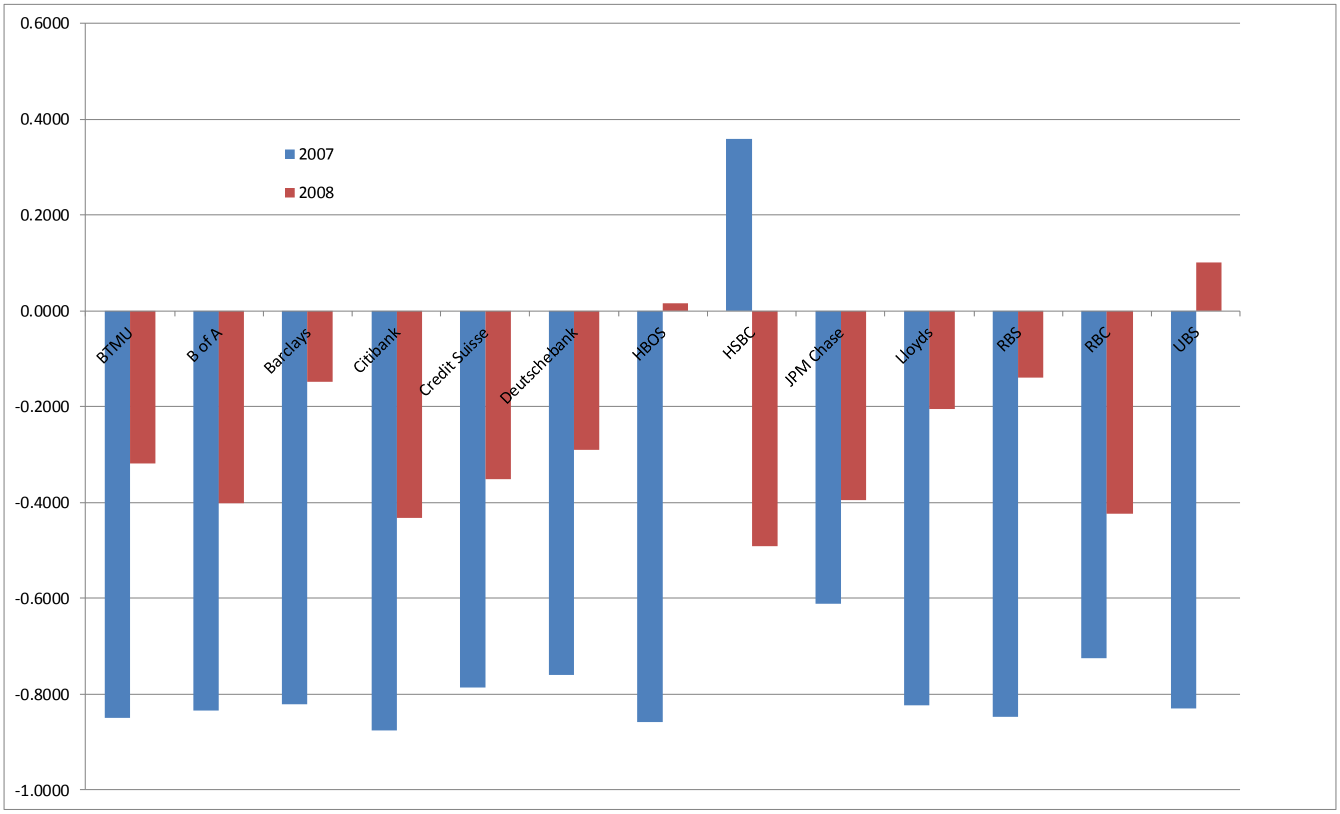
Graph 2

Correlation Coefficients
Between Each Bank's Daily USD LIBOR Bid and Probability of Default (PD)
Three-Month Term



(Note: PD are estimated daily using the reduced form model of Kamakura Risk Information Services.)

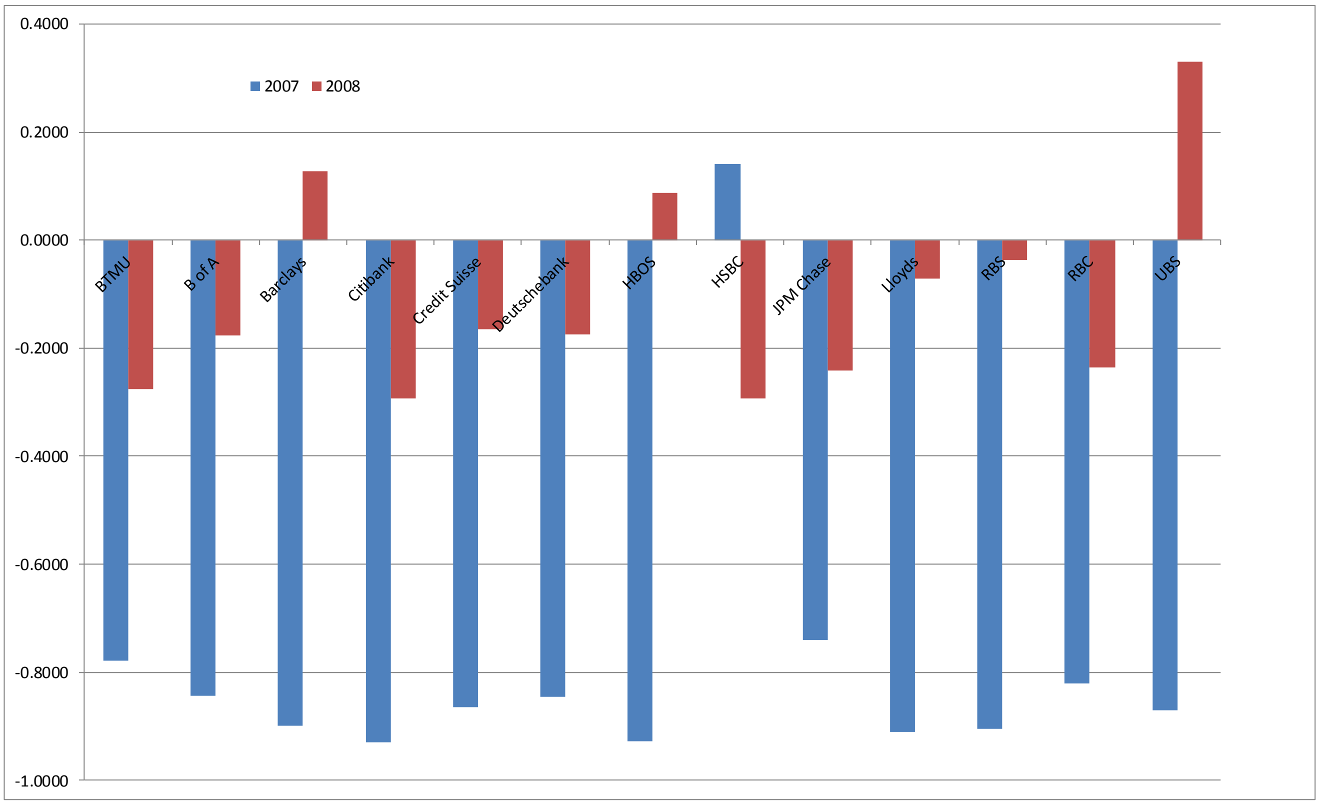
<u>Graph 3</u>
Correlation Coefficients
Between Each Bank's Daily USD LIBOR Bid and Probability of Default (PD)
Six-Month Term



(Note: PD are estimated daily using the reduced form model of Kamakura Risk Information Services.)

Graph 4

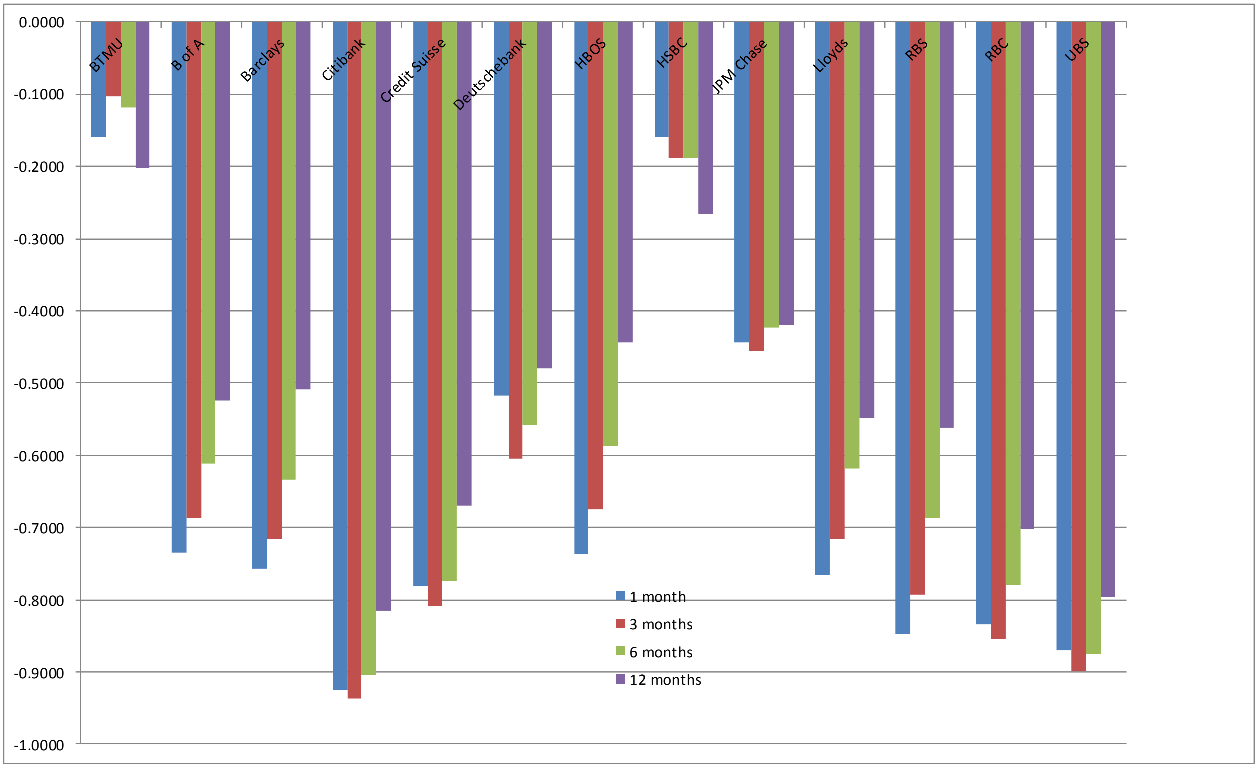
Correlation Coefficients
Between Each Bank's Daily USD LIBOR Bid and Probability of Default (PD)
Twelve-Month Term



(Note: PD are estimated daily using the reduced form model of Kamakura Risk Information Services.)

Graph 5

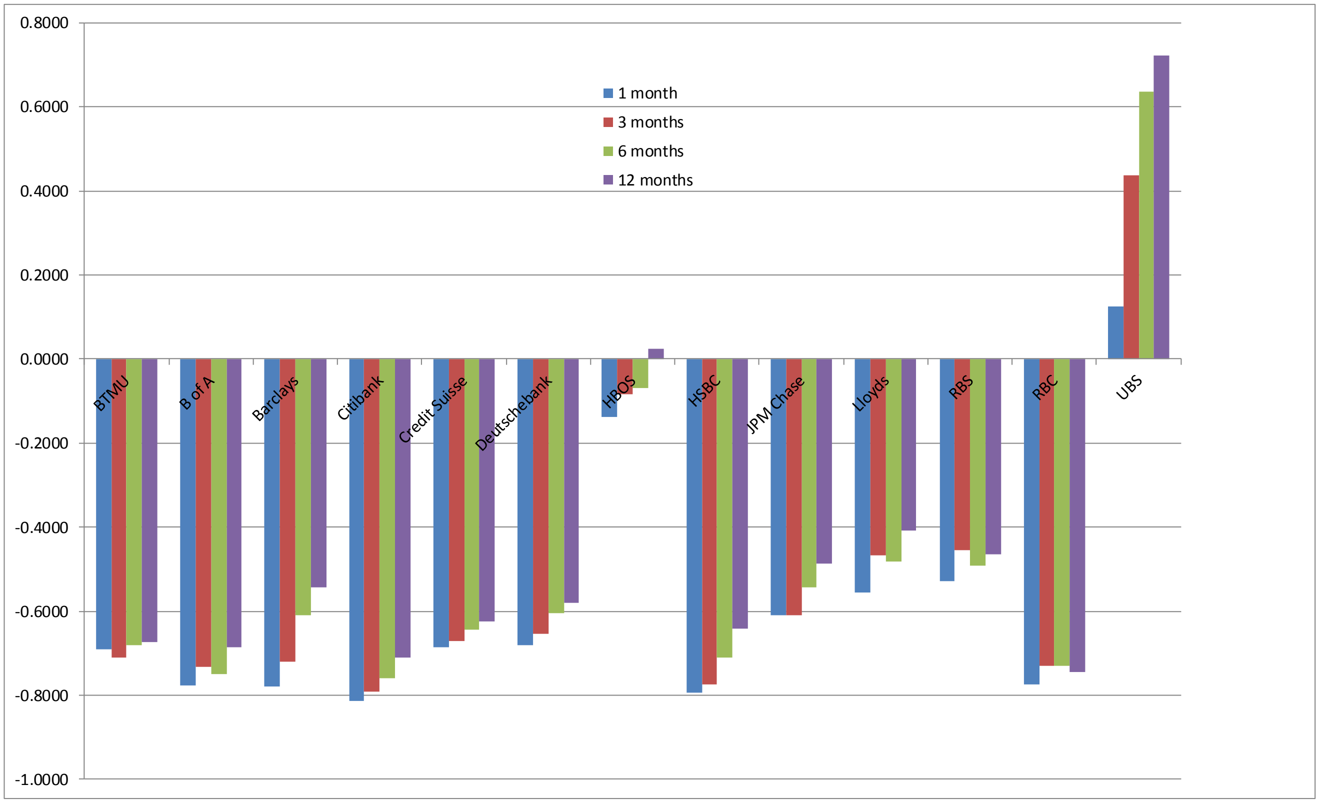
Correlation Coefficients
Between Each Bank's Daily USD LIBOR Bid and Probability of Default (PD)
9 August 2007 – 12 September 2008 Period



(Note: PD are estimated daily using the reduced form model of Kamakura Risk Information Services.)

Graph 6

Correlation Coefficients
Between Each Bank's Daily USD LIBOR Bid and Probability of Default (PD)
15 September 2008 – 31 December 2008 Period



(Note: PD are estimated daily using the reduced form model of Kamakura Risk Information Services.)

b. <u>Federal Reserve Eurodollar Deposit Rate Analysis</u>

78. As demonstrated by the work of another independent consulting expert retained by the Schwab Plaintiffs and other plaintiffs in the LIBOR MDL Proceedings, analysis of the Eurodollar market indicates that Defendants suppressed their LIBOR quotes and colluded to suppress reported LIBOR rates. Moreover, this analysis further supports Plaintiffs' allegations that Defendants colluded to control the amount of suppression during the Relevant Period.

79. The U.S. Federal Reserve prepares and publishes Eurodollar deposit rates for banks (the "Federal Reserve Eurodollar Deposit Rate"). These Eurodollar deposit rates are analogous to LIBOR in that they reflect the rates at which banks in the London Eurodollar money market lend U.S. dollars to one another, just as LIBOR is intended to reflect rates at which panel banks in the London interbank market lend U.S. dollars to one another. The Federal

Reserve obtains its data from Bloomberg and the ICAP brokerage company.[32] The Bloomberg Eurodollar deposit rate is similar to BBA's LIBOR except that the sampling is not limited to the 16 banks (during the Relevant Period) chosen by the BBA. ICAP is a large broker-dealer in London in Eurodollar deposits.[33] ICAP surveys its client banks and updates its Eurodollar deposit rates at about 9:30 AM each morning.

80. While Defendants could have access to the ICAP Eurodollar deposit rates prior to submitting their individual LIBOR quotes at 11:00 each day, they would not—absent collusion—have access to other bank LIBOR quotes, which are confidential until submitted. Thus, even within the context of a suppressed LIBOR, absent collusion, individual panel banks would not know what quote other panel banks intended to submit relative to the Federal Reserve Eurodollar Deposit Rate.

81. The consulting expert determined that because of the nature of the relationship between the Federal Reserve Eurodollar Deposit Rate and LIBOR (detailed below), it would be unusual even for one bank to submit a LIBOR bid below the Federal Reserve's Eurodollar Deposit Rate. For all Defendants to submit bids below the Federal Reserve Eurodollar Deposit Rate would be extremely unusual, and strongly supports evidence of collusion among the banks.

82. Economic and statistical analysis strongly supports the use of the Federal Reserve Eurodollar Deposit rate as a benchmark for measuring the validity of LIBOR as reported by the panel banks. To measure how well the Federal Reserve Eurodollar Deposit Rate and LIBOR move together, for the purposes of this analysis, the difference between the two rates, the "Spread," is calculated as follows: Spread = BBA LIBOR – Federal Reserve Eurodollar Deposit Rate.

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[32] *See* http://federalreserve.gov/releases/h15/data.htm, fn. 8.

[33] "ICAP is the world's premier voice and electronic interdealer broker and the source of global market information and commentary for professionals in the international financial markets. The group is active in the wholesale markets in interest rates, credit, energy, foreign exchange and equity derivatives. ICAP has an average daily transaction volume in excess of $1.5 trillion, more than 60% of which is electronic. ICAP plc was added to the FTSE 100 Index on 30 June 2006. For more information go to www.icap.com." *See* http://www.icapenergy.com/company/.

83. Since both LIBOR and the Federal Reserve Eurodollar Deposit Rate measure the lending cost to banks of Eurodollar deposits, important market and financial fundamentals, such as day-to-day changes in monetary policy, market risk and interest rates, as well as risk factors facing the banks generally (collectively "Market Fundamentals"), should be reflected similarly on both variables, and therefore should not affect the Spread. The BBA's LIBOR panel is intended to reflect the Eurodollar deposit market in London. By focusing on the Spread, the model therefore should be able to factor out normal and expected co-movements in banks' LIBOR quotes that arise from changes in Market Fundamentals.

84. To analyze how well the Federal Reserve Eurodollar Deposit Rate captures changes in Market Fundamentals and absorbs variations in LIBOR that are driven by such fundamentals, consulting experts used regression analysis to measure the day-to-day changes in the Spread against changes in the T-Bill rate and the commercial paper rate. The evidence from these regressions strongly supports that day-to-day changes in the Federal Reserve Eurodollar Deposit Rate effectively capture day-to-day movements in LIBOR caused by Market Fundamentals. Thus, once the Federal Reserve Eurodollar Deposit Rate is subtracted to arrive at the Spread, remaining movements in LIBOR reflected in the Spread would be unrelated to movements in Market Fundamentals.

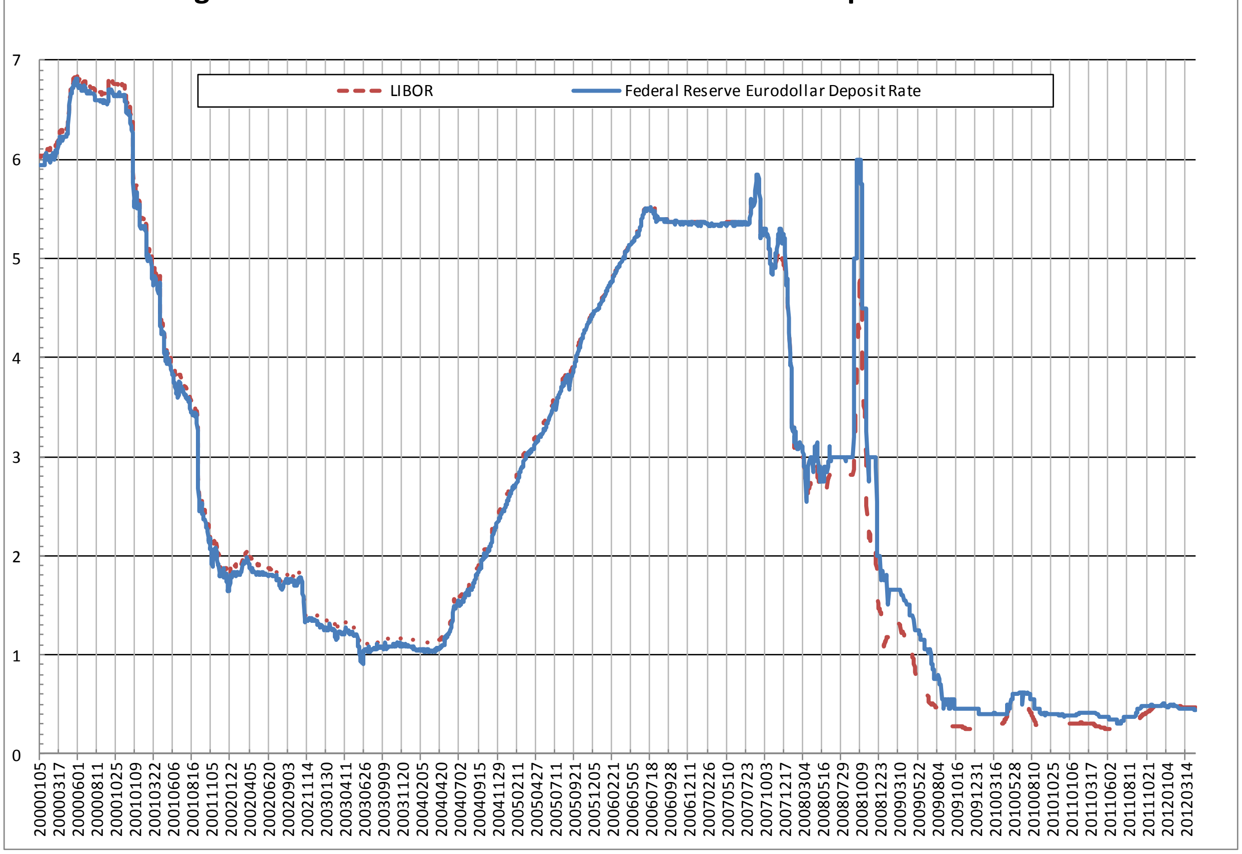
85. Because Market Fundamentals are fully captured by the Spread, absent manipulation, the Spread should always be zero or close to zero. Thus, as more fully discussed below, negative Spreads provide a strong basis to conclude that Defendants suppressed and colluded to artificially suppress LIBOR.[34]

86. Figures 1 and 2 show the relationship between LIBOR, the Federal Reserve Eurodollar Deposit Rate, and the Spread beginning in 2000 and ending in mid 2012. As can be seen, between January 5, 2000 and around August 7, 2007, Federal Reserve's Eurodollar Deposit

[34] It is important to note that to the extent panel banks submitting LIBOR quotes submit suppressed rates to the BBA, and these suppressed rates are also considered by Bloomberg or ICAP, then the resultant Federal Reserve Eurodollar Deposit rate would also be understated by the same suppression. Consequently, the Spread computed above could even understate the true magnitude of the suppression.

Rate tracked LIBOR very closely and the Spread remained positive and very close to zero. This finding indicates that the Spread effectively captures shared risks of the banks sampled by BBA and by Bloomberg and ICAP. The validity of this finding is bolstered by the fact that the Spread remained very close to zero in the face of multiple major financial dislocations, including the bursting of the dot-com bubble in 2000, the terrorist attacks of September 2001, and the 2001 U.S. economic recession. Likewise, the unusual downward movements in the Spread starting in August 2007 strongly evidences that LIBOR was being manipulated and suppressed during this period.[35]

Figure 1: LIBOR and Federal Reserve Eurodollar Deposit Rate



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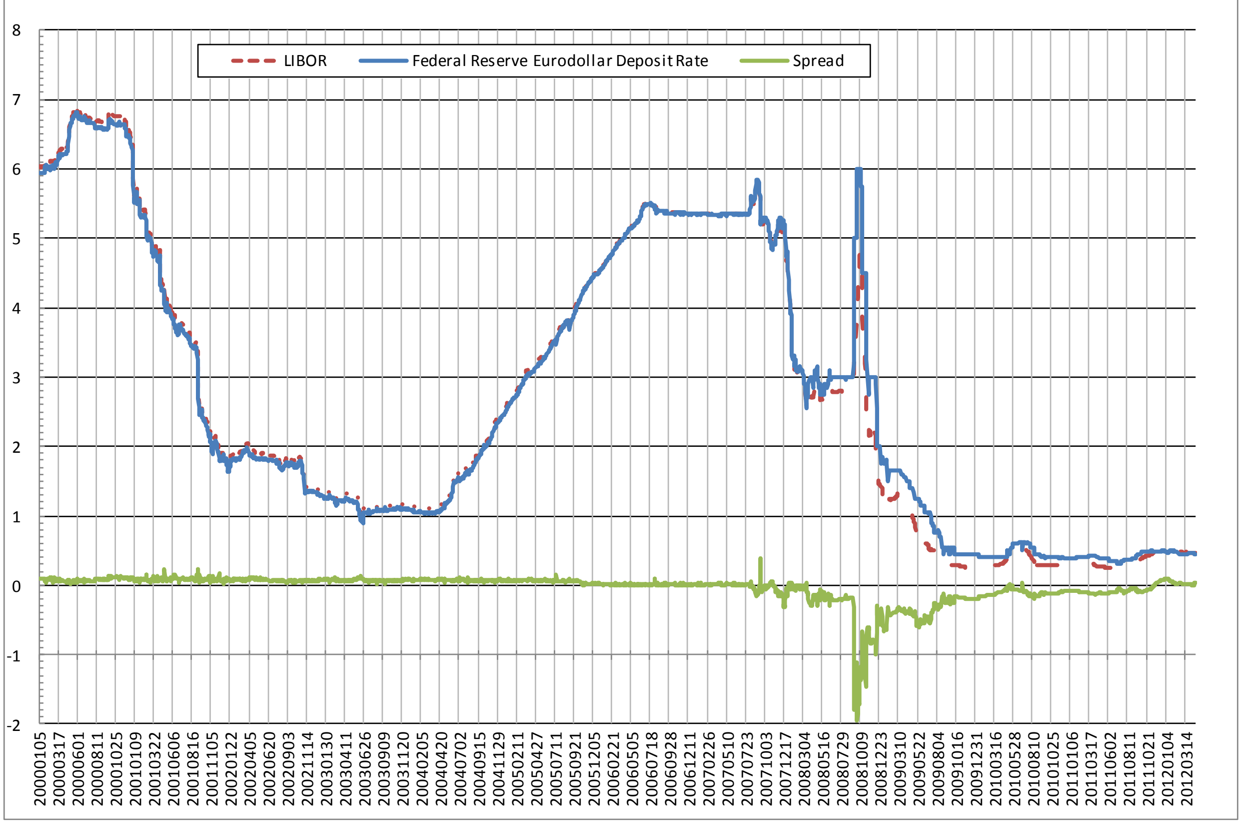
[35] The Spread only became consistently positive around the end of October 2011, just after the European Commission raided banks in connection with LIBOR.

Figure 2: LIBOR and Federal Reserve Eurodollar Deposit Rate



87. Figure 3 shows the Spread between 3-month maturity BBA LIBOR and the Federal Reserve Eurodollar Deposit rate (3-month maturity BBA LIBOR – Federal Reserve Eurodollar Deposit rate), from January 2006 through early April 2012.

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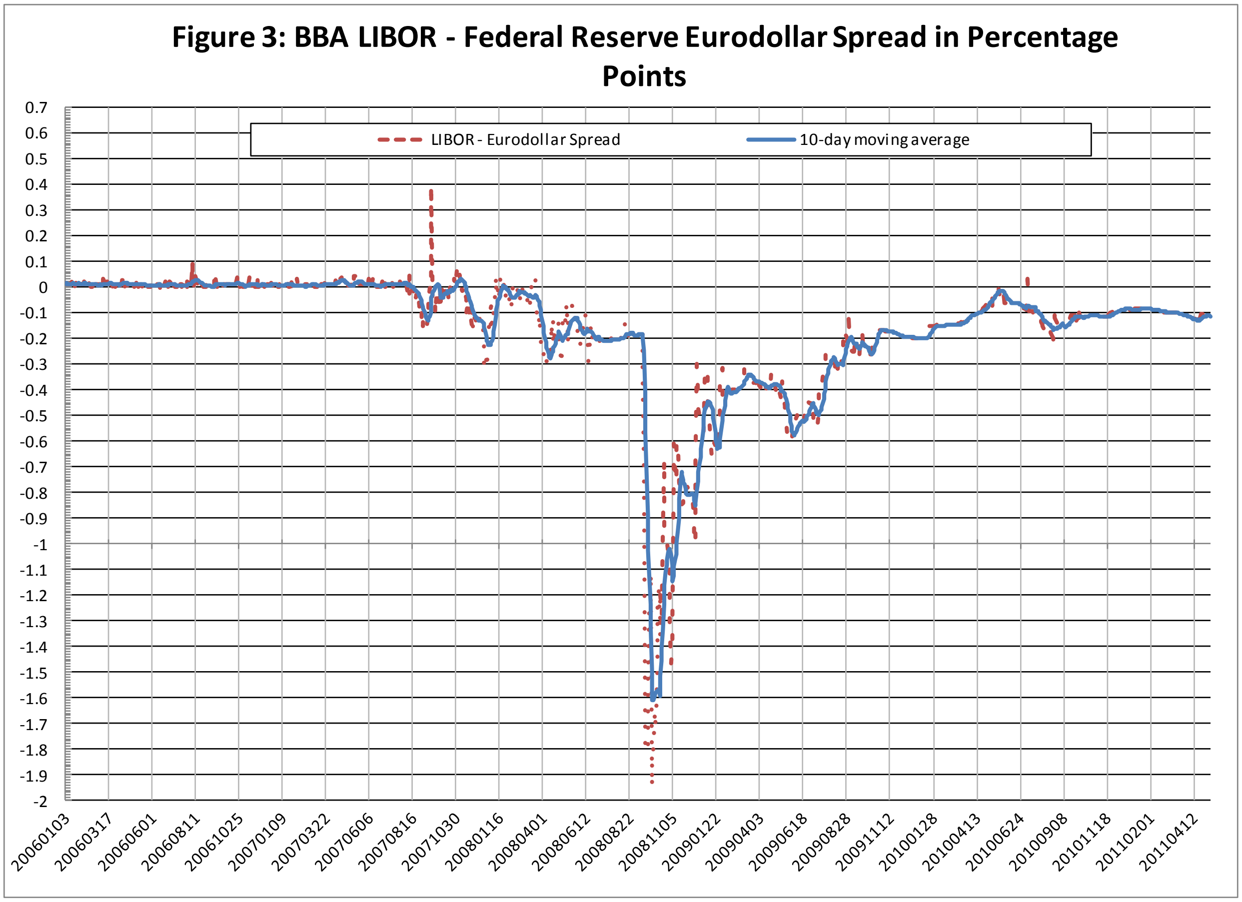

88. The shorter period between January 3, 2006 and August 7, 2007 demonstrated above contains 393 trading days. In this sub-period, there were only 3 days when the Spread was negative. Furthermore, the magnitudes of these negative Spreads were also very small, equaling -0.9 basis point on June 14, 2006, -0.5 basis point on July 27, 2006 and -0.2 basis point on November 2, 2006.[36] This finding again strongly supports that the Federal Reserve Eurodollar Deposit Rate serves as a good benchmark to control for Market Fundamentals that determine LIBOR. The average magnitude of the Spread during this period equaled less than one basis point. This finding also strongly supports that the risks of the banks sampled by BBA and Bloomberg and ICAP were similar.

89. By August 2007, however, the Spread began to move into negative territory. During the early part of August 2007, the Federal Reserve Eurodollar Deposit Rate stayed

[36] One basis point is one-hundredth of a percentage point.

around 5.36%. On August 8, the Federal Reserve Eurodollar Deposit Rate increased by 5 basis points to 5.41%, while BBA LIBOR did not keep pace. The Spread turned negative 3 basis points on August 8, 2007. The Spread remained mostly negative after August 7 so that by August 15, 2007, the trailing 10-day moving-average of the Spread also turned negative. By August 31, 2007, the Federal Reserve Eurodollar Deposit rate kept increasing to 5.78%, while LIBOR was lagging. The negative Spread on August 31 grew to -16 basis points.

90. The Spread remained negative over the next year. Between August 31, 2007 and September 15, 2008, the Spread remained negative on 234 of the 255 days, or 91.7% of the days. The magnitude of the negative Spread averaged about -12 basis points. During this approximately one year period, the negative Spread exceeded -25 basis points on 18 days.

91. A big shock to LIBOR (and the Spread) came just after Lehman Brothers filed for bankruptcy on September 15, 2008, leading to significantly increased concerns about the health of all banks. The increased concerns about the health of the banks were reflected in substantial increases in the Federal Reserve Eurodollar Deposit Rate. On September 15, 2008, the Federal Reserve Eurodollar Deposit Rate equaled 3.0%, increasing to 3.2%, 3.75%, and 5% on September 16, 17 and 18, respectively. By September 30, the Federal Reserve Eurodollar Deposit Rate doubled to 6%.

92. In spite of increased risks and worries about the banks after the Lehman bankruptcy filing, LIBOR did not keep pace with the Federal Reserve Eurodollar Deposit Rate during this period of heightened concerns, causing the Spread to become more negative. On September 16, 2008, the negative Spread nearly doubled to -32 basis points. The next day, on September 17, the negative Spread doubled again, reaching -69 basis points. On September 18, the negative Spread more than doubled once again, reaching -180 basis points. Finally, on September 30, 2008, the negative Spread reached -195 basis points.

93. Thus, between September 15, 2008 and September 30, 2008, the Federal Reserve Eurodollar Deposit Rate increased by 300 basis points to reflect increasing concerns about the banks, while LIBOR increased by less than one-half, or by 123 basis points during the same

period. This diversion in the behavior of the two rates strongly supports the finding that Defendants intensified their collusive suppression of the LIBOR, and did so to understate their borrowing costs in the face of increasing concerns about the health of the banks.

94. The Spread remained negative for more than one and a half years following the Lehman filing, until May 17, 2010. As concerns about banks' financial health eased, so did the magnitude of the suppression of LIBOR. As stated earlier, Federal Reserve's Eurodollar Deposit Rate reached 6% on September 30, 2008. With the easing of the financial crisis, Federal Reserve's Eurodollar Deposit Rate fell to 0.45% on May 17, 2010. The average suppression of the LIBOR rate between October 1, 2008 and May 17, 2010 equaled negative 38 basis points. The Spread finally turned positive for the first time during the post-Lehman period on May 17, 2010. Following this date, the Spread again became negative, with the magnitude of the Spread averaging around -10 basis points. The dramatic period of negative Spread during the Relevant Period, following years of uniform behavior between each individual Defendant Bank's LIBOR quote and the Federal Reserve Eurodollar Deposit Rate, is also graphically demonstrated by Figures 4 to 19 below on a bank by bank basis. Every Spread during the period August 8, 2007 to May 17, 2010 is statistically significant at the extremely high 99% confidence level.

Figure 4: HSBC LIBOR - Federal Reserve Eurodollar Spread in Percentage Points

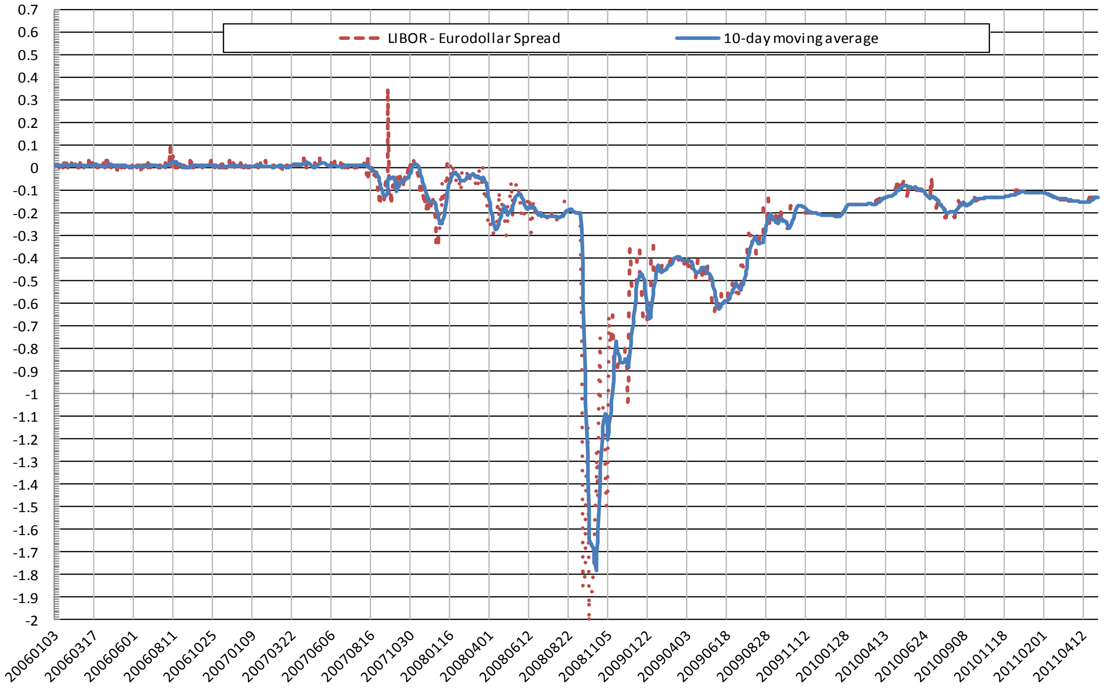

Figure 5: JPMorganChase LIBOR - Federal Reserve Eurodollar Spread in Percentage Points

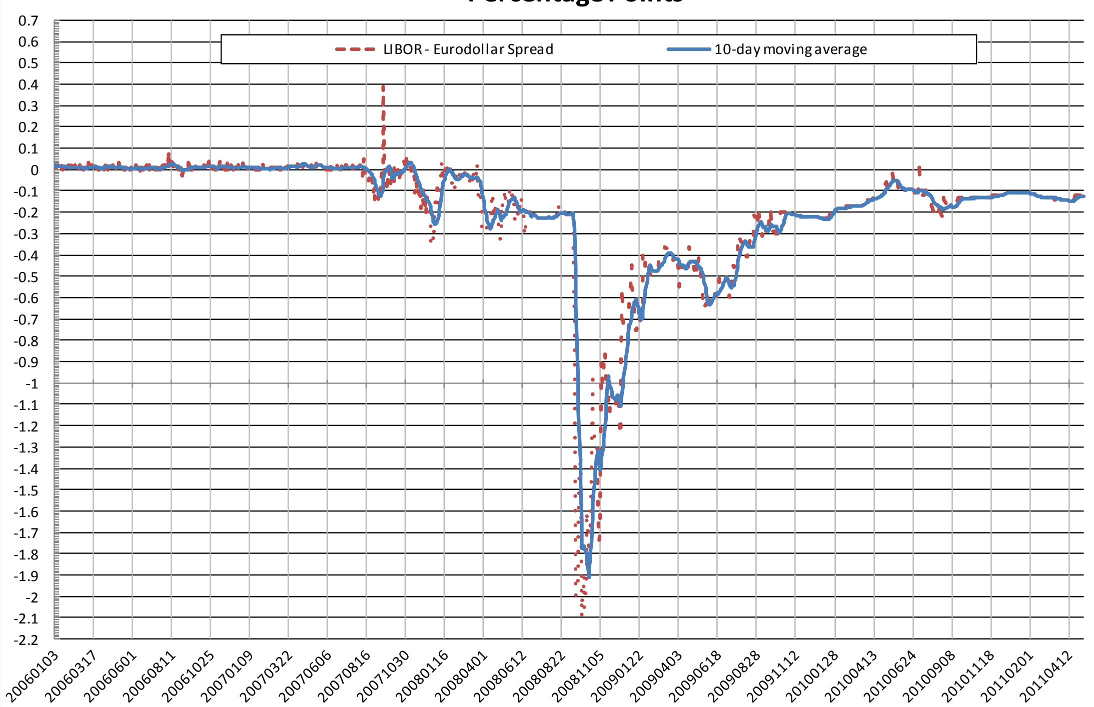

Figure 6: Barclays LIBOR - Federal Reserve Eurodollar Spread in Percentage Points

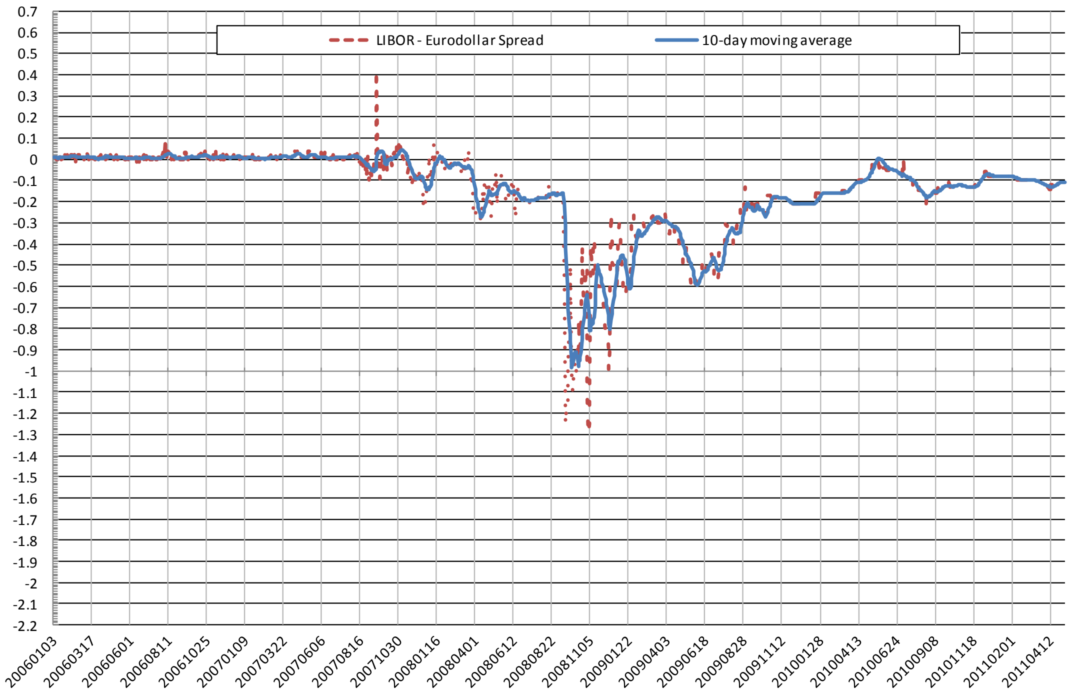

Figure 7: Deutsche Bank LIBOR - Federal Reserve Eurodollar Spread in Percentage Points

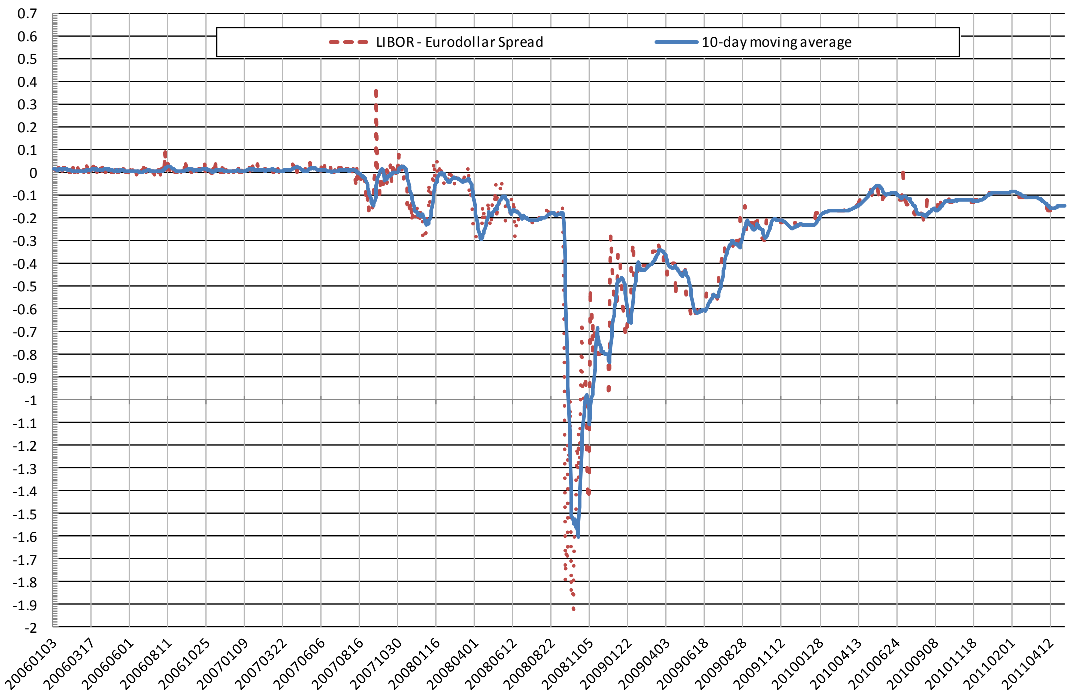

Figure 8: Lloyds LIBOR - Federal Reserve Eurodollar Spread in Percentage Points

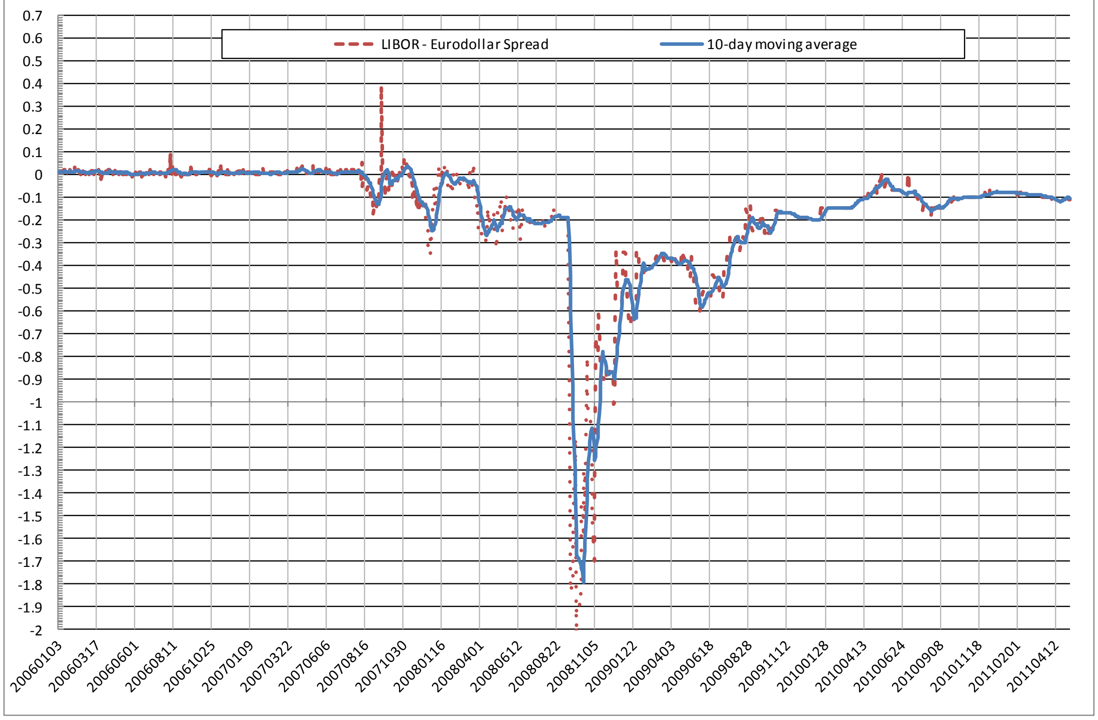

Figure 9: WestLB LIBOR - Federal Reserve Eurodollar Spread in Percentage Points

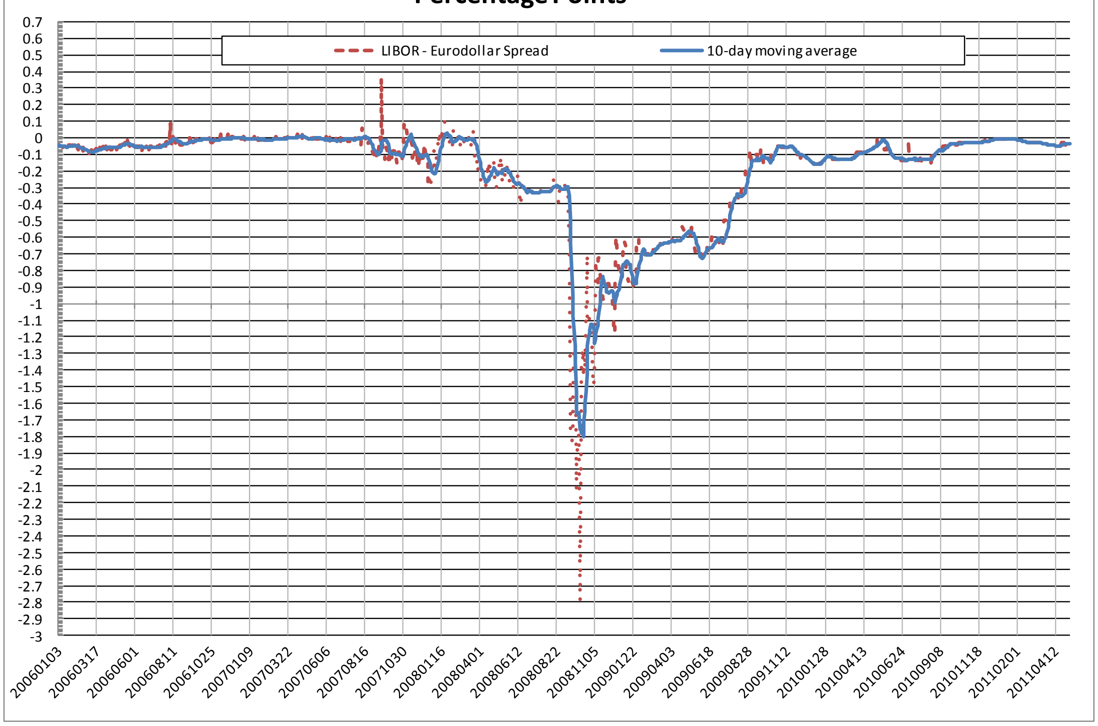

Figure 10: RBS LIBOR - Federal Reserve Eurodollar Spread in Percentage Points

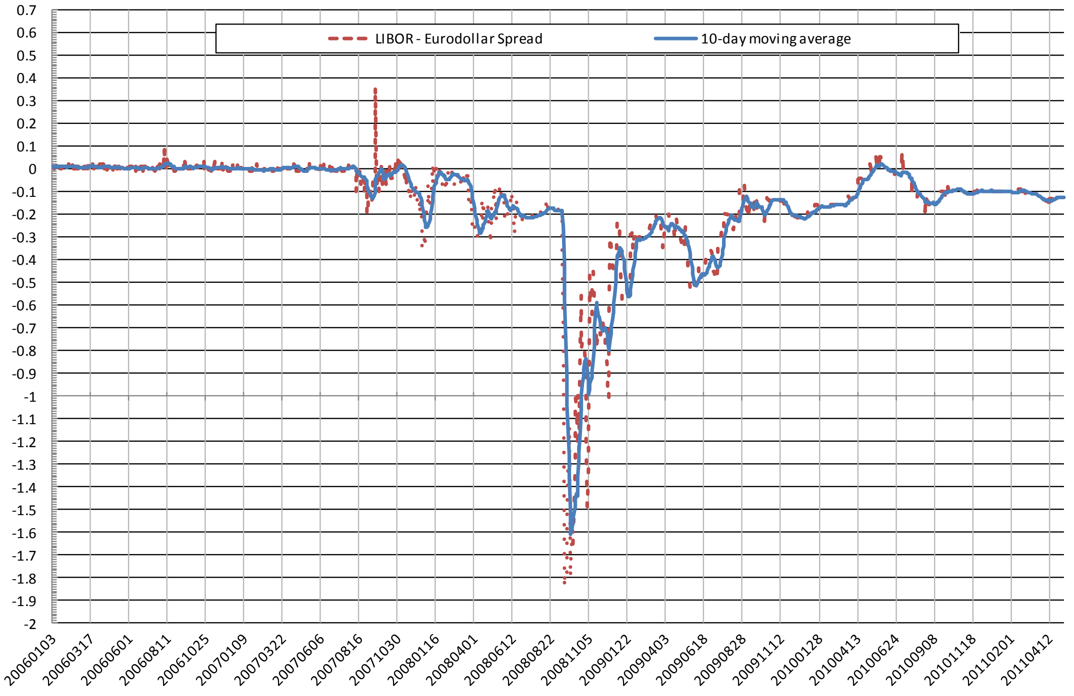

Figure 11: Rabo Bank LIBOR - Federal Reserve Eurodollar Spread in Percentage Points

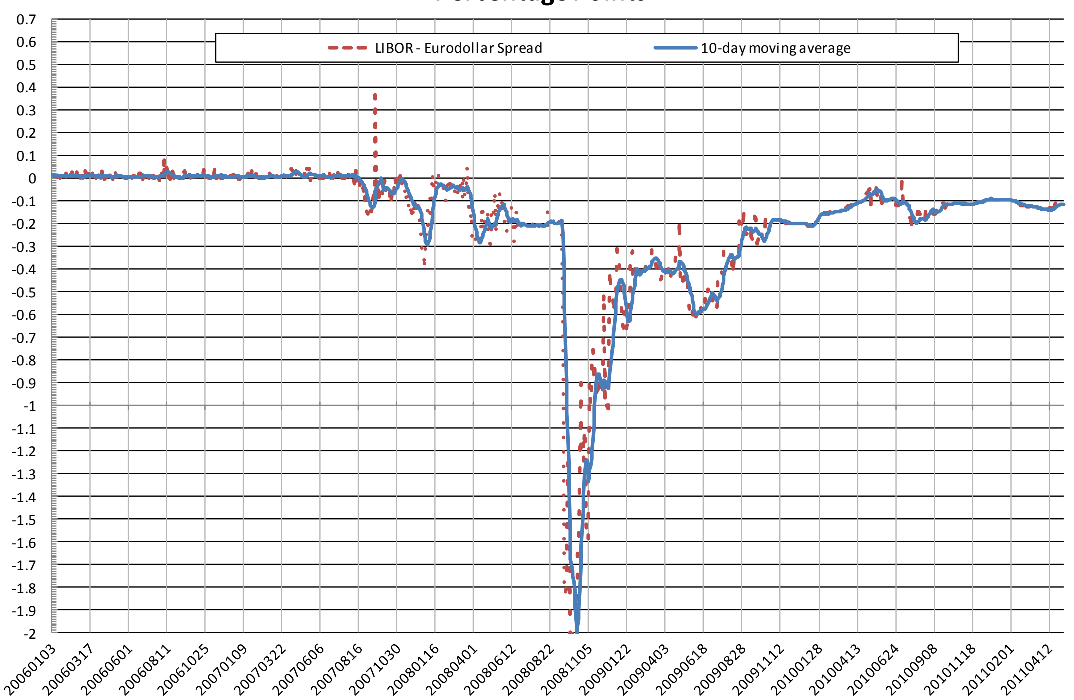

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Figure 12: Bank of Tokyo LIBOR - Federal Reserve Eurodollar Spread in Percentage Points

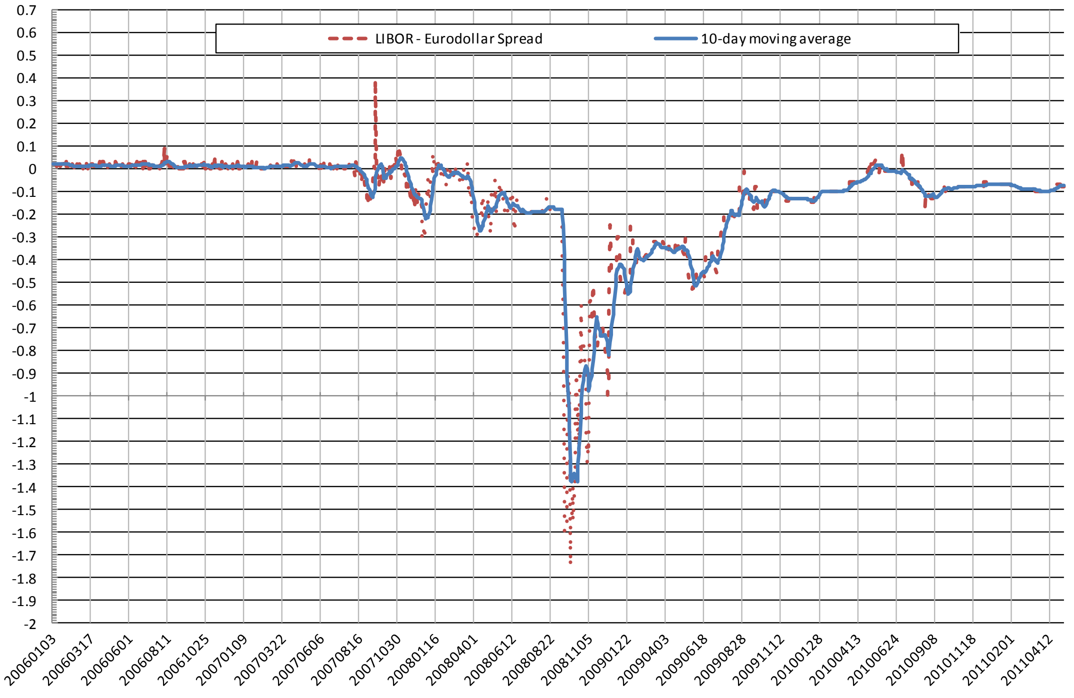

Figure 13: Citi LIBOR - Federal Reserve Eurodollar Spread in Percentage Points

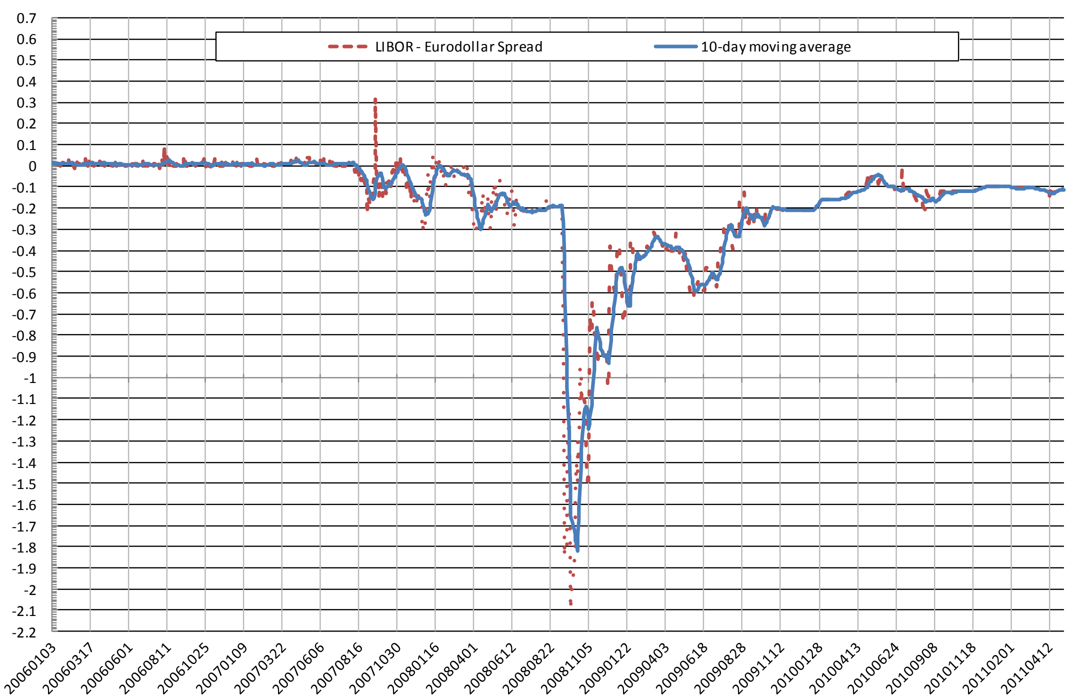

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Figure 14: CS LIBOR - Federal Reserve Eurodollar Spread in Percentage Points

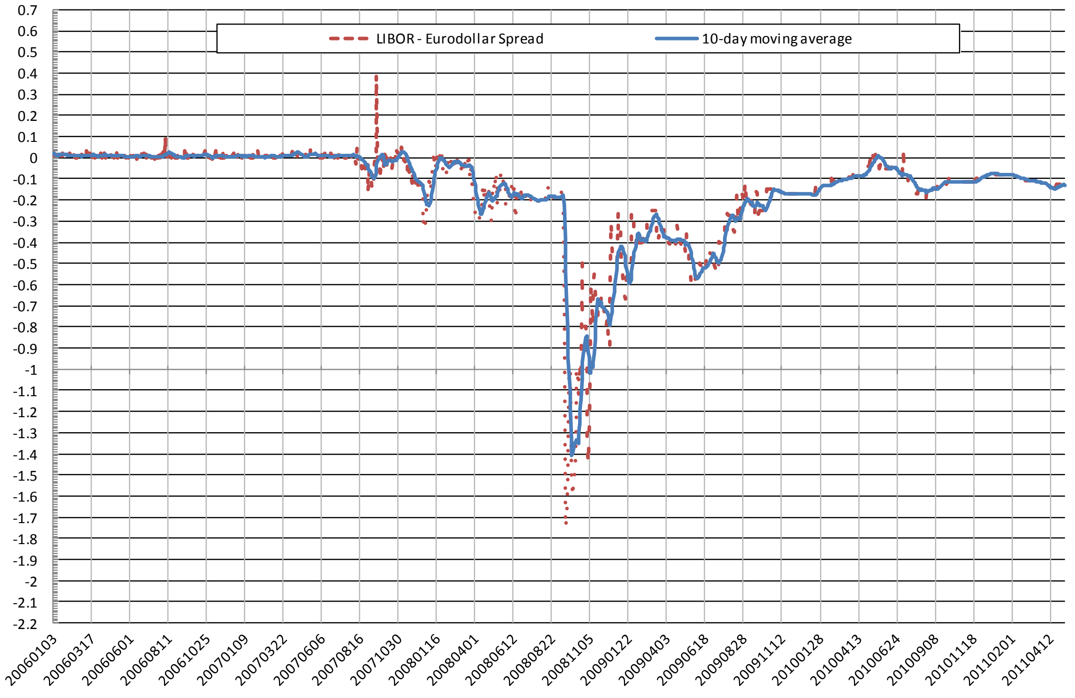

Figure 15: BoA LIBOR - Federal Reserve Eurodollar Spread in Percentage Points

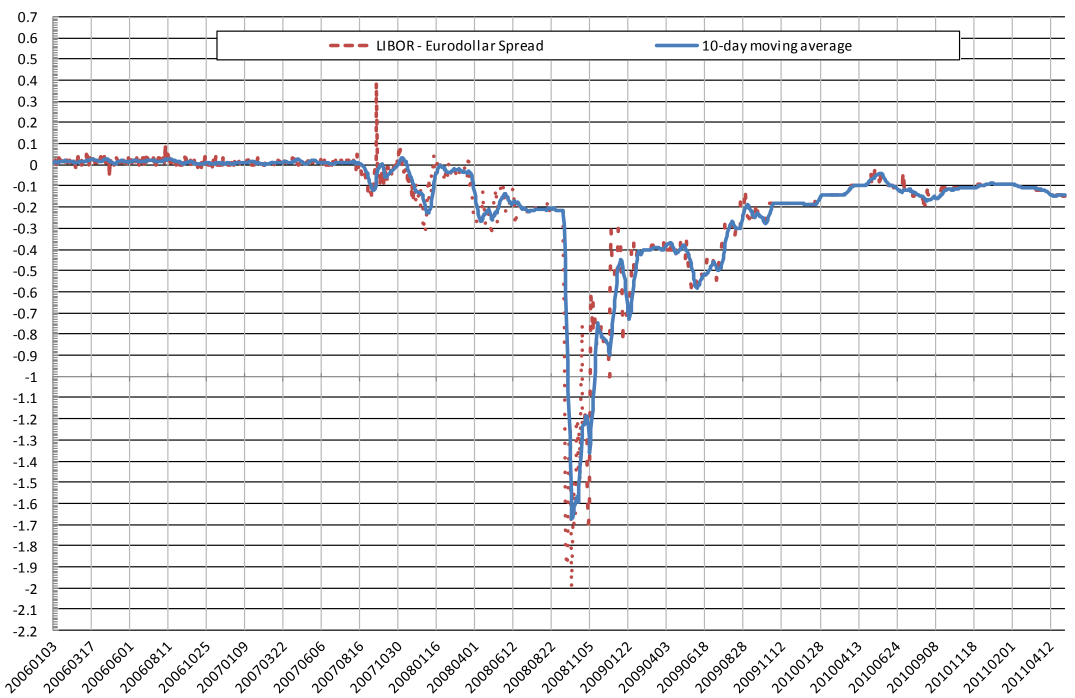

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Figure 16: RBC LIBOR - Federal Reserve Eurodollar Spread in Percentage Points

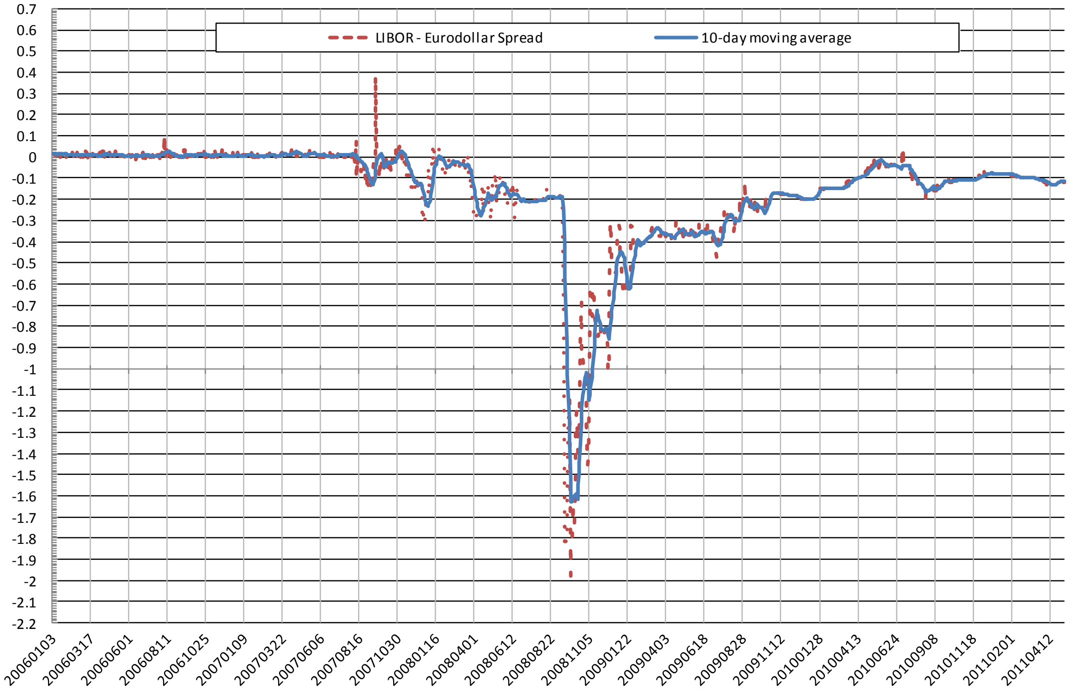


Figure 17: UBS LIBOR - Federal Reserve Eurodollar Spread in Percentage Points

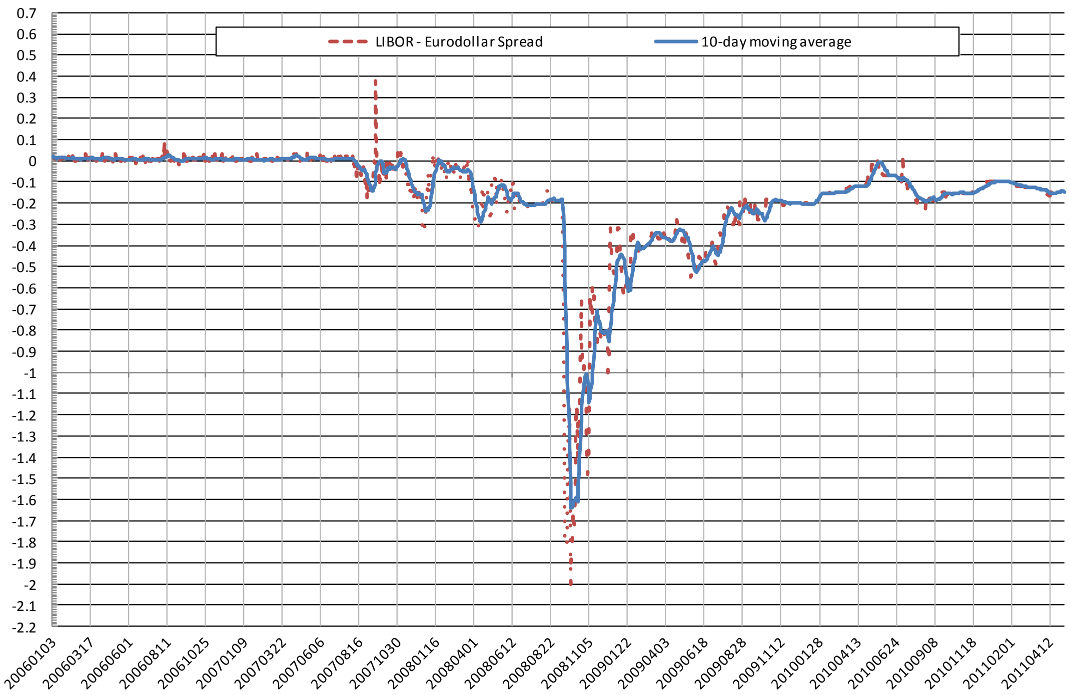


Figure 18: Norin LIBOR - Federal Reserve Eurodollar Spread in Percentage Points

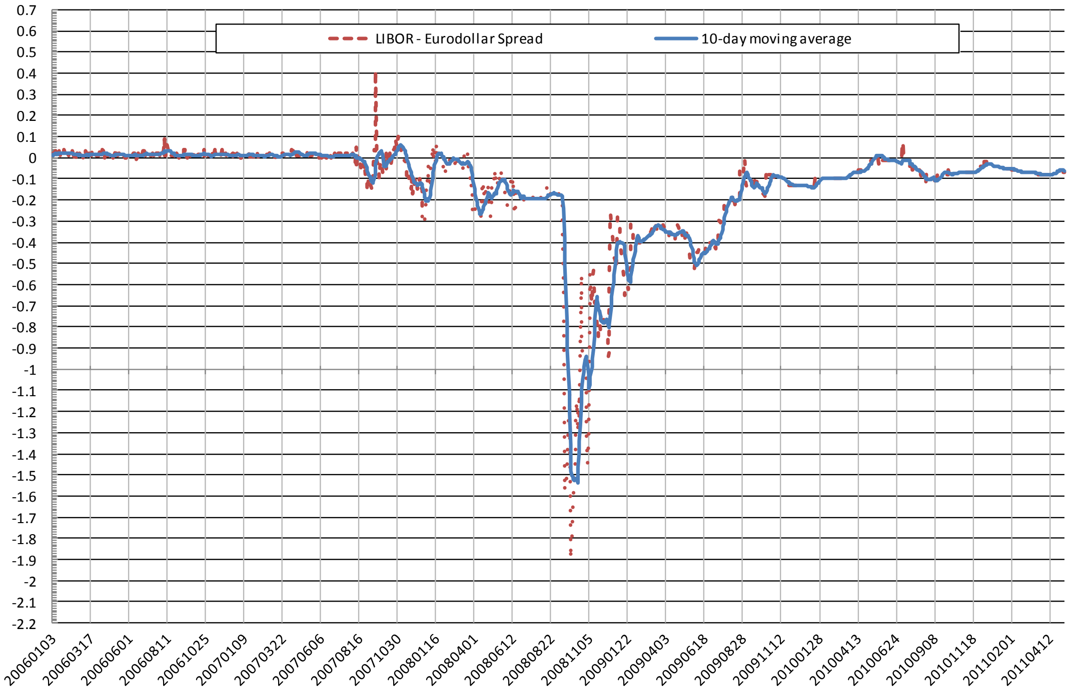
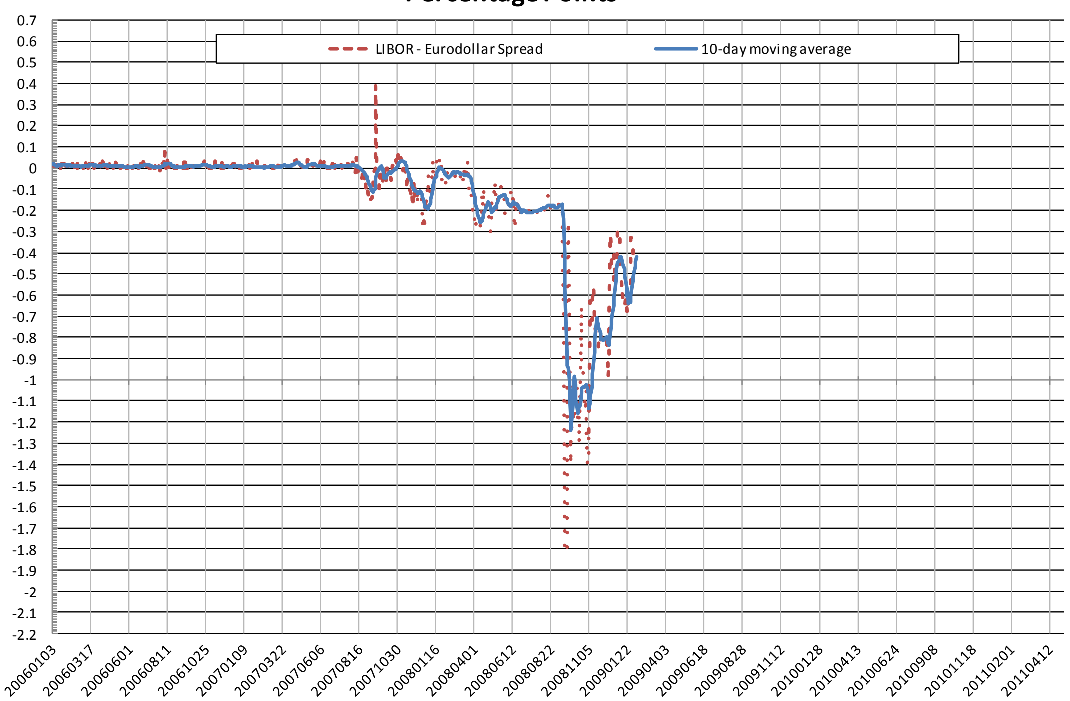


Figure 19: HBOS LIBOR - Federal Reserve Eurodollar Spread in Percentage Points



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95. As the following chart demonstrates, the average Spread for each Defendant was uniformly negative throughout the Relevant Period, strongly supporting that each of these banks was suppressing its USD LIBOR quotes, and colluding to suppress reported USD LIBOR rates.

Bank Name	**Average Spread between August 8, 2007 through May 17, 2010**
1. Bank of Tokyo-Mitsb.	-25 basis points
2. Bank of America	-30 basis points
3. Barclays	-25 basis points
4. Citi	-32 basis points
5. CSFB	-27 basis points
6. Deutsche Bank	-31 basis points
7. HBOS	-29 basis points
8. HSBC	-32 basis points
9. JP Morgan Chase	-35 basis points
10. Lloyds	-30 basis points
11. Norinchukin	-25 basis points
12. RaboBank	-32 basis points
13. Royal Bank of Canada	-28 basis points
14. Royal Bank of Scotland	-26 basis points
15. UBS	-29 basis points
16. West	-35 basis points

96. Moreover, as set forth in the following chart, during the critical two week period following the bankruptcy of Lehman Brothers, each Defendant dramatically increased its collusive suppression of USD LIBOR.

Bank Name	**Average Spread between September 16, 2008 and September 30, 2008**
1. Bank of Tokyo-Mitsb.	-120 basis points
2. Bank of America	-144 basis points
3. Barclays	-87 basis points
4. Citi	-142 basis points
5. CS	-122 basis points
6. Deutsche Bank	-129 basis points
7. HBOS	-110 basis points
8. HSBC	-141 basis points
9. JP Morgan Chase	-153 basis points
10. Lloyds	-146 basis points
11. Norinchukin	-126 basis points
12. Rabo Bank	-143 basis points
13. Royal Bank of Canada	-140 basis points
14. Royal Bank of Scotland	-140 basis points
15. UBS	-141 basis points
16. West	-138 basis points

97. Every Spread during the period from September 16, 2008 to September 30, 2008 is statistically significant at the extremely high 99% confidence level.

98. The consulting experts found the results reflected in these two tables to be powerful and statistically significant evidence of Defendants' collusive suppression of LIBOR during the Relevant Period.

99. As detailed above, analysis based on well accepted statistical methodologies strongly supports that suppression of USD LIBOR occurred during the Relevant Period,

accomplished through the wrongful and collusive conduct of Defendants. The sustained period during which the Federal Reserve Eurodollar Deposit – LIBOR Spread fell and remained starkly negative, as seen in Figure 2 above, accounting as it does for Market Fundamentals, is not plausibly achievable absent wrongful conduct and collusion among Defendants. The intensified suppression from September 16, 2008 to September 30, 2008 (following the Lehman bankruptcy), in defiance of economic expectations, provides further support for the suppression of LIBOR achieved through collusion by Defendants. Because no Defendant bank—absent collusive conduct—could know what USD LIBOR quote another panel bank actually intended to submit prior to those numbers being made public after 11:00 in the morning, the fact that all Defendants submitted LIBOR quotes below the Federal Reserve Eurodollar Deposit Rate over the Relevant Period further strongly supports the participation of each Defendant bank in the suppressive and collusive scheme.

3. Empirical Analyses by Academics and Other Commentators Further Indicate LIBOR Suppression Occurred.

100. In addition to the independent expert work detailed above, publicly available analyses by academics and other commentators collectively indicate USD LIBOR was artificially suppressed during the Relevant Period.

a. CDS Analysis

101. One economic indicator that Defendants suppressed USD LIBOR during the Relevant Period is the variance between their LIBOR quotes and their contemporaneous cost of buying default insurance—i.e., a credit-default swap ("CDS")—on debt they issued during that period. A CDS, "the most common form of credit derivative, i.e., [a] contract which transfers credit risk from a protection buyer to a credit protection seller,"[37] constitutes an agreement by which one party, the protection buyer, seeks financial protection in the event of a default on an underlying credit instrument (typically a bond or loan). Typically, a CDS buyer makes a series

[37] *Eternity Global Master Fund Ltd. v. Morgan Guar. Trust Co. of N.Y.*, 375 F.3d 168, 171-72 (2d Cir. 2004) (alteration in original) (citation and internal quotation marks omitted).

of payments (often referred to as the CDS "fee" or "spread") to the CDS seller in exchange for a payment if the underlying credit instrument experiences an adverse credit event.

102. The spread serves as a measure of the perceived risk of default by the entity issuing the underlying bond or receiving the loan; the greater the risk of default the underlying bond or loan bears, the greater the CDS spread. In the case of a CDS for which the underlying instrument consists of an interbank loan where a USD LIBOR panel bank is the borrower, the greater the perceived risk the panel bank will default on the loan, the higher the applicable CDS spread, as this higher spread represents the cost of insuring against the increased risk of a default on the underlying loan.

103. As one commentator observed, "The cost of bank default insurance has generally been positively correlated with LIBOR. That is, in times when banks were thought to be healthy, both the cost of bank insurance and LIBOR decreased or remained low, but when banks were thought to be in poor condition, both increased."[38] During the Relevant Period, however, those historically-correlated indicia of banks' borrowing costs diverged significantly.

104. That discrepancy was detailed in a May 29, 2008 *Wall Street Journal* article reporting the results of a study it had commissioned. The *Journal*'s analysis indicated numerous banks caused LIBOR, "which is supposed to reflect the average rate at which banks lend to each other," to "act as if the banking system was doing better than it was at critical junctures in the financial crisis."[39] The *Journal* found that beginning in January 2008, "the two measures began to diverge, with reported LIBOR rates failing to reflect rising default-insurance costs."

105. The *Journal* observed that the widest gaps existed with respect to the USD LIBOR quotes of Defendants Citibank, WestLB, HBOS, JPMorgan Chase, and UBS. According to the *Journal*'s analysis, Citibank's LIBOR rates differed the most from what the CDS market suggested the bank's borrowing cost was. On average, the rates at which Citibank reported it

[38] Justin Wong, "LIBOR Left in Limbo; A Call for More Reform," 13 *North Carolina Banking Institute* 365, 371 (2009) (footnotes omitted).

[39] *See* Carrick Mollenkamp and Mark Whitehouse, "Study Casts Doubt on Key Rate --- WSJ Analysis Suggests Banks May Have Reported Flawed Interest Data for Libor."

could borrow dollars for three months (i.e., its three-month LIBOR rates) were about 87 basis points lower than the rates calculated using CDS data. WestLB, HBOS, JPMorgan Chase, and UBS likewise exhibited significant LIBOR-CDS discrepancies—of 70, 57, 43, and 42 basis points, respectively—while Defendants Credit Suisse, Deutsche Bank, Barclays, HSBC, Lloyds, and RBS each exhibited discrepancies of about 30 basis points. The study's authors concluded "one possible explanation for this gap is that banks understated their borrowing rates."

106. The *Journal* further observed that on the afternoon of March 10, 2008, investors in the CDS market were betting that WestLB—hit especially hard by the credit crisis—was nearly twice as likely to renege on its debts as Credit Suisse, perceived to be in better shape, was, yet the next morning the two banks submitted identical LIBOR quotes.

107. Additionally, having compared the banks' LIBOR quotes to their actual costs of borrowing in the commercial-paper market, the *Journal* reported, for example, that in mid-April 2008, UBS paid 2.85% to borrow dollars for three months, but on April 16, 2008, the bank quoted a borrowing cost of 2.73% to the BBA.

108. The *Journal* further noted an uncanny equivalence between the LIBOR panel banks' quotes: the three-month borrowing rates the banks reported remained within a range of only 0.06 of a percentage point, even though at the time their CDS insurance costs (premiums) varied far more widely, reflecting the market's differing views as to the banks' creditworthiness. According to Stanford University professor Darrell Duffie, with whom the authors of the *Journal* article consulted, the unity of the banks' LIBOR quotes was "far too similar to be believed."

109. David Juran, a statistics professor at Columbia University who reviewed the *Journal*'s methodology, similarly concluded that the *Journal*'s calculations demonstrated "very convincingly" that reported USD LIBOR rates were lower, to a statistically significant degree, than what the market thought they should be.

110. Calculating an alternate borrowing rate incorporating CDS spreads, the *Journal* estimated that underreporting of USD LIBOR had a $45 billion effect on the market,

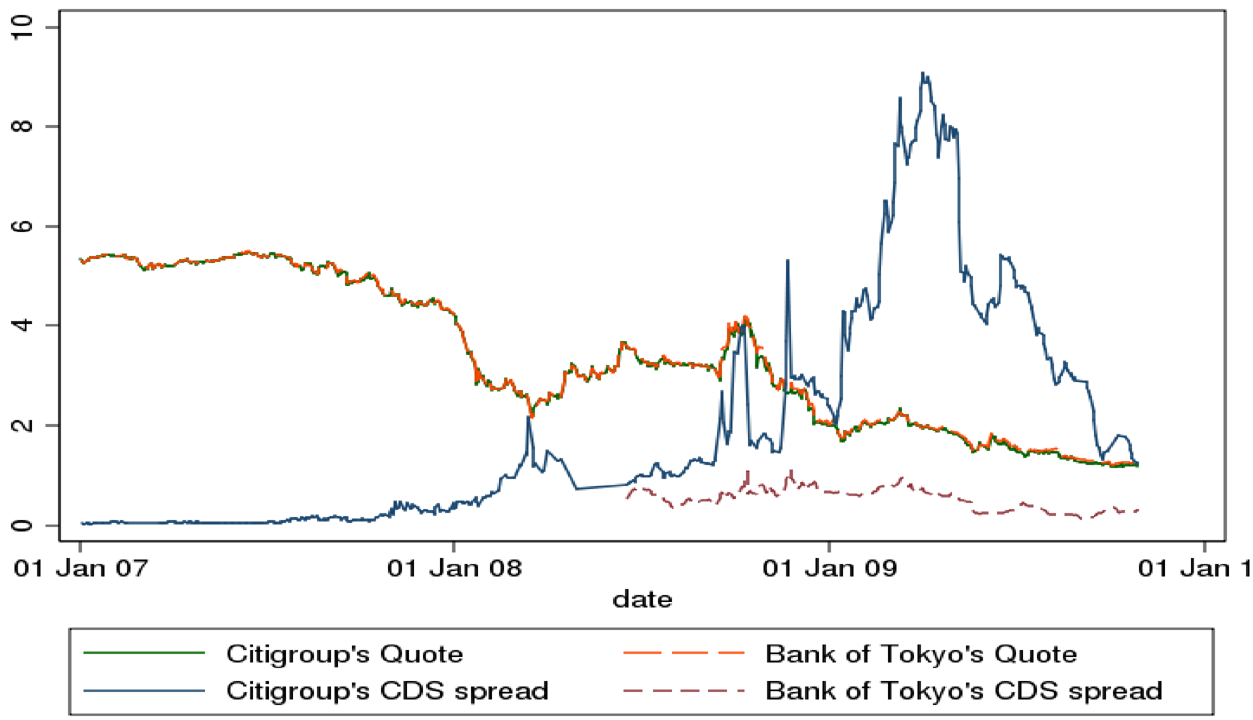
representing the amount borrowers (the banks) did not pay to lenders (investors in debt instruments) that they would otherwise have had to pay.

111. According to the *Journal*, three independent academics, including Professor Duffie, reviewed its methodology and findings, at the *Journal*'s request. All three deemed the *Journal*'s approach "reasonable."

112. Further economic analysis supports the correlation seen in the *Journal*'s report. A study by Connan Snider and Thomas Youle of the economics departments at UCLA and the University of Minnesota, respectively, released in April 2010 concluded that LIBOR did not accurately reflect average bank borrowing costs, its "ostensible target."[40] Noting that "[i]n a competitive interbank lending market, banks' borrowing costs should be significantly related to their perceived credit risk," Snider and Youle posited that if LIBOR quotes "express true, competitively determined borrowing costs," they should "be related to measures of credit risks, such as the cost of default insurance." According to Snider and Youle's analysis, however, quotes provided by USD LIBOR panel banks in fact deviated from their costs of borrowing as reflected in CDS spreads.

113. Comparing, for example, the 12-month USD LIBOR quotes from Citigroup and Bank of Tokyo together with the banks' respective one-year senior CDS spreads, Snider and Youle observed (as illustrated in the graph below) "that while Citigroup has a substantially higher CDS spread than [Bank of Tokyo], it submits a slightly lower Libor quote." Accordingly, the authors explain, while the CDS spreads "suggest that the market perceives Citigroup as riskier than [Bank of Tokyo], as it is more expensive to insure against the event of Citigroup's default," the banks' LIBOR quotes "tell the opposite story."

[40] Connan Snider and Thomas Youle, "Does the LIBOR reflect banks' borrowing costs?", Apr. 2, 2010.

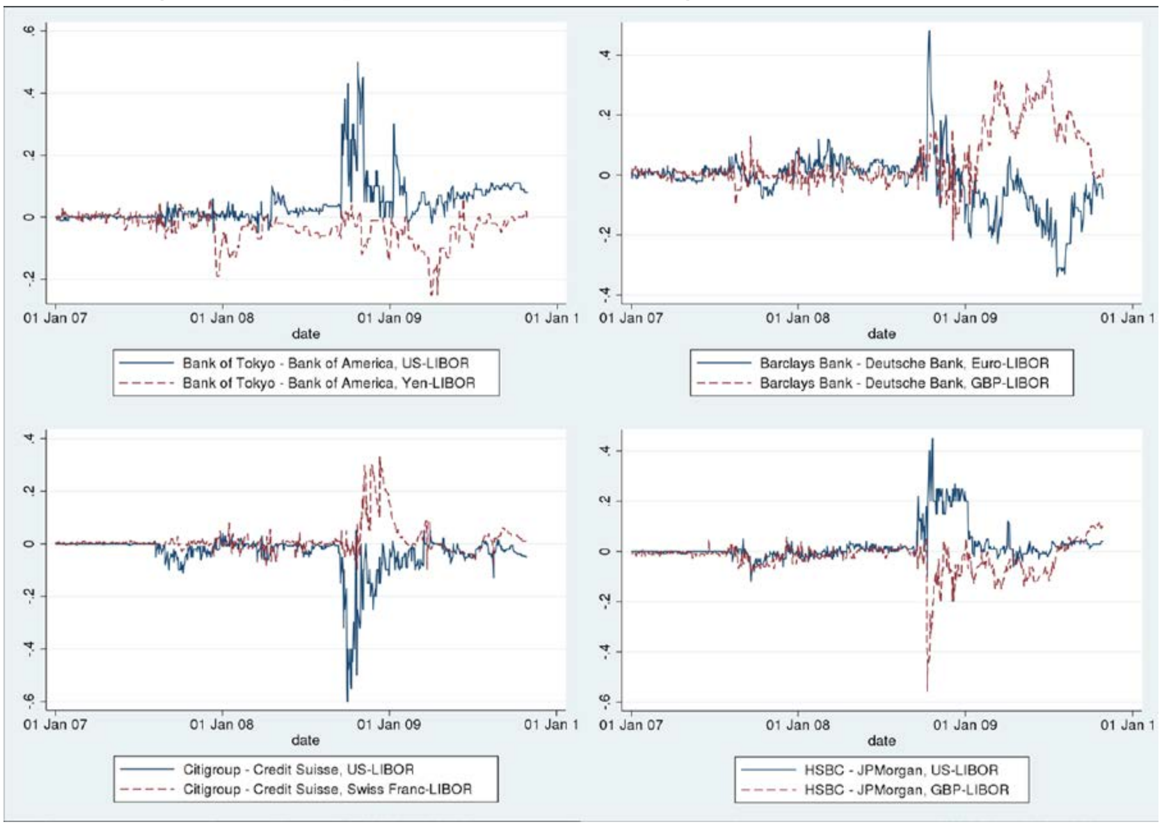


114. Snider and Youle further noted that the level of Citigroup's CDS spreads relative to its LIBOR quotes was "puzzling." The authors explained, "Given that purchasing credit protection for a loan makes the loan risk free, one would expect [the] difference between the loan rate and the CDS spread to roughly equal the risk free rate. This corresponds to the idea that a loan's interest rate contains a credit premium, here measured by the CDS spread." But the authors observed that Citigroup's quote was often "significantly below its CDS spread," implying "there were interbank lenders willing to lend to Citigroup at rates which, after purchasing credit protection, would earn them ***a guaranteed 5 percent loss***." (Emphasis added). That discrepancy contravenes basic rules of economics and finance, thus indicating Citibank underreported its borrowing costs to the BBA.

b. <u>Cross-Currency Discrepancies in Analysis</u>

115. Defendants' LIBOR quotes also displayed inexplicable "cross-currency rank reversals." That is, as detailed in Snider and Youle's paper referenced above, at least some Defendants reported lower rates on USD LIBOR than did other panel members but, for other currencies, provided higher rates than did those same fellow banks. Both Bank of America and Bank of Tokyo, for instance, quoted rates for USD LIBOR and Yen LIBOR during the period

under study, yet Bank of America quoted a lower rate than Bank of Tokyo for USD LIBOR and a higher rate than Bank of Tokyo for Yen LIBOR. Other Defendants included in Snider and Youle's analysis—Barclays, Citigroup, and JPMorgan Chase—displayed similar anomalies across currencies, as the graphs below illustrate. Citigroup, for example, often reported rates at the top of the Yen LIBOR scale while simultaneously quoting rates at the bottom of the USD LIBOR scale. Because, Snider and Youle explain, "the same bank is participating in each currency," the credit risk "is the same for loans in either currency"; thus these "rank reversals" demonstrate that differences in the banks' LIBOR quotes "are not primarily due to differences in credit risk, something we would expect of their true borrowing costs."



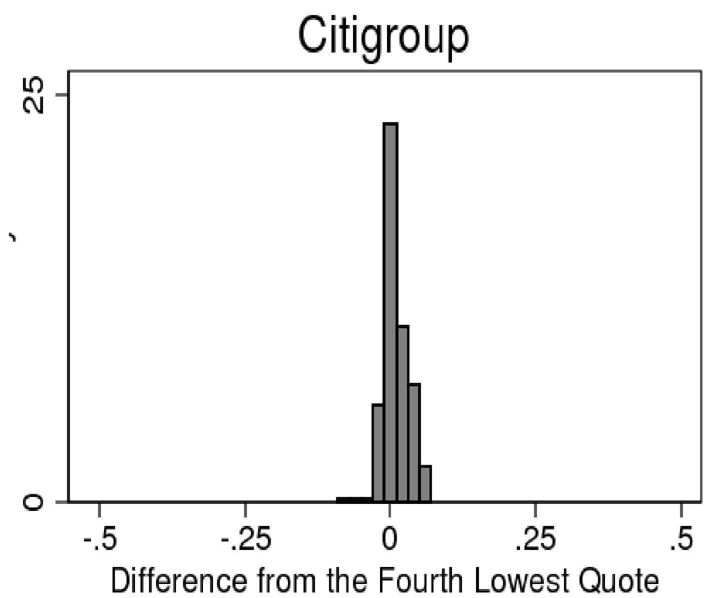
c. "Bunching" Analysis

116. During the Relevant Period, the rates reported by certain Defendants—in particular, Citibank, Bank of America, and JPMorgan Chase—also demonstrated suspicious "bunching" around the fourth-lowest quote submitted by the 16 banks to the BBA. Indeed, Citibank's and Bank of America's quotes often tended to be identical to the fourth-lowest quote

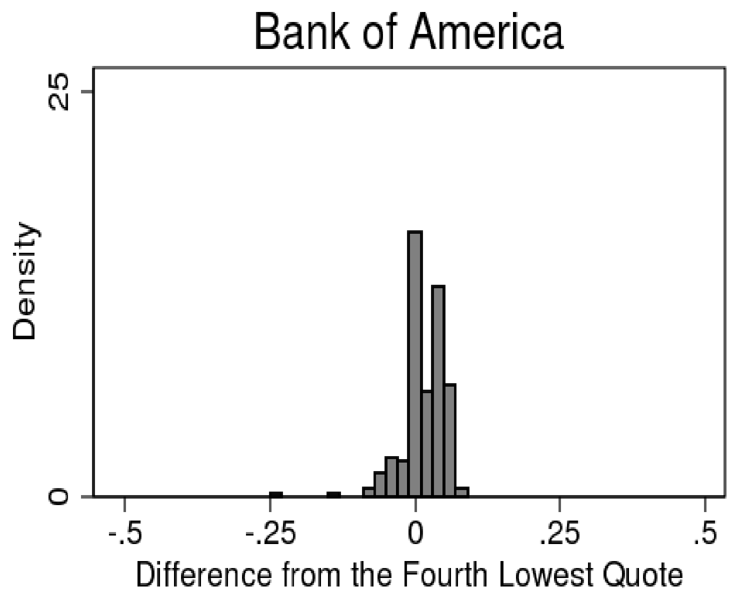
for the day. Because the USD LIBOR calculation involved excluding the lowest (and highest) four reported quotes every day, bunching around the fourth-lowest quote suggests Defendants collectively depressed LIBOR by reporting the lowest possible rates that would not be excluded from the calculation of LIBOR on a given day.

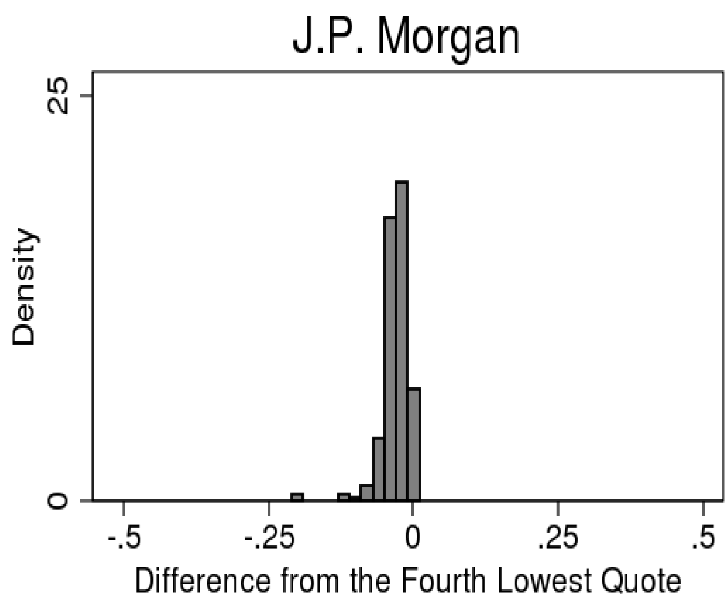
117. Bunching among Defendants' respective LIBOR quotes indicates Defendants intended to report the same or similar rates, notwithstanding the banks' differing financial conditions, which, as detailed below, reasonably should have resulted in differing LIBOR quotes. Those discrepancies suggest Defendants colluded to suppress LIBOR.

118. The following charts show the frequency with which the USD LIBOR quotes submitted by Defendants Citigroup, Bank of America, and JPMorgan Chase fell within a given percentage rate from the fourth-lowest quote. A negative difference means the reporting bank was below the fourth-lowest quote, and therefore its rate was not included in the daily LIBOR calculation, while zero difference means that the bank reported the fourth-lowest quote on a given day (either by itself or tied with other reporting banks).[41]



[41] In the event of a tie between two or more banks, one of the banks' quotes, selected at random, was discarded.





119. According to Snider and Youle, the fact that bunching occurred around the pivotal fourth-lowest reported rate reflects the reporting banks' intention to ensure that the lowest borrowing rates were included in the calculation of USD LIBOR (which includes only the fifth-lowest through the twelfth-lowest quotes).

120. In other words, banks that bunched their quotes around the fourth-lowest submission helped ensure the maximum downward manipulation of the resulting rate.

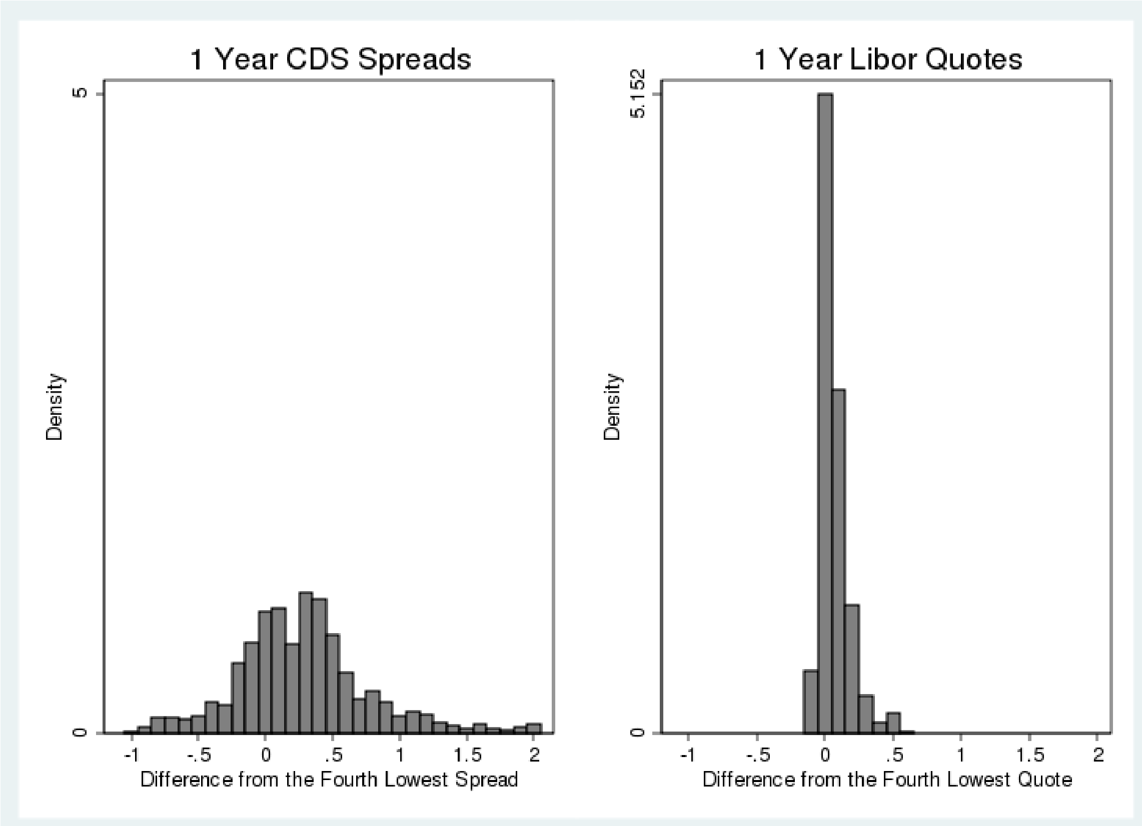
Furthermore, that a panel bank reported one of the four lowest quotes (i.e., quotes excluded from the ultimate LIBOR calculation) does not mean the bank did not also participate in the collusion.

121. Further demonstrating the aberrant nature of the bunching around the fourth-lowest quote, Snider and Youle noted "the intraday distribution of ***other*** measures of bank borrowing costs do not exhibit this bunching pattern." (Emphasis added).

122. Additionally, Snider and Youle detailed a discrepancy between USD LIBOR panel banks' LIBOR quotes and their CDS spreads, i.e., that "with the intra-day variation of both Libor quotes and CDS spreads increasing from their historical levels," the CDS spreads' intra-day variation "grew considerably larger than that of Libor quotes."[42]

123. Snider and Youle further observed that—as the graphs below, embodying a composite of all the banks, illustrate—during the Relevant Period Defendants' quotes tended to "bunch" around the fourth-lowest quote much more commonly than those banks' CDS spreads "bunched" around the fourth-lowest spread. The authors concluded, "If banks were truthfully quoting their costs, . . . we would expect these distributions to be similar."

[42] Snider and Youle, "Does the LIBOR reflect banks' borrowing costs?"



124. Given the method by which the BBA calculates LIBOR—discarding the highest and lowest reported rates and averaging the remainder—that strong concentration around the fourth-lowest rate is exactly what would occur if a number of banks sought in concert to depress LIBOR.

d. <u>Federal Reserve Auction Rate Analysis</u>

125. A comparison between LIBOR and the Federal Reserve auction rate further suggests that Defendants artificially suppressed LIBOR during the Relevant Period. An April 16, 2008 *Wall Street Journal* article, for example, noted the Federal Reserve had recently auctioned off $50 billion in one-month loans to banks for an average annualized interest rate of 2.82%, 10 basis points higher than the comparable USD LIBOR rate. That differential would make no economic sense if the reported LIBOR rate was accurate, the *Journal* observed: "Because banks put up securities as collateral for the Fed loans, they should get them for a lower rate than Libor, which is riskier because it involves no collateral."

126. A subsequent *Journal* article raised further concerns about LIBOR's accuracy based on the comparison of one-month LIBOR with the rate for the 28-day Federal Reserve auction.[43] According to the *Journal*, because the Federal Reserve requires collateral:

> banks should be able to pay a lower interest rate [to the Fed] than they do when they borrow from each other [e.g., as ostensibly measured by LIBOR] because those loans are unsecured. It is the same reason why rates for a mortgage, which is secured by a house, are lower than those for credit cards, where the borrower doesn't put up any collateral. In other words, the rate for the Fed auction should be lower than Libor.

To the contrary, though, two days before the *Journal* article (September 22, 2008), the rate for the 28-day Fed facility was 3.75%, much higher than one-month USD LIBOR, which was 3.18% that day[44] and 3.21% the next day.

e. <u>Overnight Index Swaps Analysis</u>

127. Yet another measure of LIBOR's aberrant behavior with respect to other measures of banks' borrowing costs during the Relevant Period is its observed deviation from the overnight-index swap ("OIS") rate. An academic article in the *North Carolina Banking Institute Journal* analyzing LIBOR data for the second half of 2007 and 2008 observed that between 2001 and July 2007, when the global credit crisis began, the spread between LIBOR and the OIS rate "averaged eleven basis points."[45] By July 2008, on the other hand, that gap approached 100 basis points—a figure significantly higher than the spread from a year earlier—and by October 2008, "it peaked at 366 basis points." While the spread "receded somewhat in November 2008 to 209 basis points," that was still "far above the pre-crisis level." That analysis indicates Defendants suppressed LIBOR.

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[43] Carrick Mollenkamp, "Libor's Accuracy Becomes Issue Again," *The Wall Street Journal*, Sept. 24, 2008.

[44] The *Journal* initially reported the one-month USD LIBOR rate for that day as 3.19% but later noted the correct figure.

[45] Justin Wong, "LIBOR Left in Limbo; A Call for More Reform."

4. <u>That At Least Some Defendants Faced Dire Financial Circumstances During the Relevant Period Further Renders Their Unduly Low LIBOR Quotes Striking.</u>

128. The independent economic analyses performed in connection with the LIBOR MDL Proceedings, whose findings are corroborated by the publicly available scholarly work detailed above, strongly indicate Defendants' LIBOR quotes during the Relevant Period did not appropriately reflect those banks' actual borrowing costs at that time, and, indeed, that Defendants collectively suppressed LIBOR. Further illustrating the striking discrepancy between Defendants' submissions to the BBA and their actual borrowing costs, during 2008 and 2009 at least some of those banks' LIBOR quotes were too low in light of the dire financial circumstances the banks faced, which were described in numerous news articles from the Relevant Period.

129. On November 21, 2008, *The Wall Street Journal* reported that Citigroup executives "began weighing the possibility of auctioning off pieces of the financial giant or even selling the company outright" after the company faced a plunging stock price. The article noted Citigroup executives and directors "rushing to bolster the confidence of investors, clients and employees" in response to uncertainty about Citigroup's exposure to risk concerning mortgage-related holdings.[46] Similarly, on November 24, 2008, *CNNMoney* observed:

> If you combine opaque structured-finance products with current fair-value accounting rules, almost none of the big banks are solvent because that system equates solvency with asset liquidity. So at this moment Citi isn't solvent. Some argue that liquidity, not solvency, is the problem. But in the end it doesn't matter. Fear will drive illiquidity to such a point that Citi could be rendered insolvent under the current fair-value accounting system.[47]

130. On January 20, 2009, Bloomberg reported that Citigroup "posted an $8.29 billion fourth-quarter loss, completing its worst year, and plans to split in two under Chief Executive Officer Vikram Pandit's plan to rebuild a capital base eroded by the credit crisis. The article

[46] *See* http://online.wsj.com/article/SB122722907151946371.html?mod=testMod.

[47] *See* http://money.cnn.com/2008/11/21/news/companies/benner_citi.fortune/.

further stated, "The problems of Citi, Bank of America and others suggest the system is bankrupt."[48]

131. An April 23, 2008 analyst report from Société Générale reported, with respect to RBS's financial condition in the midst of its attempt to raise capital:

> Given the magnitude and change in direction in a mere eight weeks, we believe that management credibility has been tarnished. We also remain unconvinced that the capital being raised is in support of growth rather than merely to rebase and recapitalise a bank that overstretched itself at the wrong point in the cycle in its pursuit of an overpriced asset.
>
> *   *   *
>
> [I]n our eyes, RBS has not presented a rock solid business case that warrants investor support and the bank has left itself almost no capital headroom to support further material deterioration in either its assets or its major operating environments. We believe £16bn (7% core tier I ratio) would have provided a solid capital buffer.

The analysts also opined, "[W]e are not of the belief that all of RBS'[s] problems are convincingly behind it." They further explained, "When faced with the facts and the events leading up to yesterday's request for a £12bn capital injection, we believe shareholders are being asked to invest further in order to address an expensive mishap in H2 07 rather than capitalise on growth opportunities."

132. On October 14, 2008, *Herald Scotland* reported a £37 billion injection of state capital into three leading banks, including RBS and HBOS. The article observed, "Without such near-nationalisations, . . . Royal Bank of Scotland and HBOS[ ] would almost certainly have suffered a run on their remaining reserves and been plunged into insolvency. Their share prices could scarcely have taken much more of their recent hammering."[49]

133. On December 12, 2008, Bloomberg reported that shareholders approved HBOS's takeover by Lloyds TSB Group plc following bad-loan charges in 2008 rising to £5 billion and an increase in corporate delinquencies. The article also quoted analysts characterizing HBOS's

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[48] *See* http://www.bloomberg.com/apps/news?pid=21070001&sid=aS0yBnMR3USk.

[49] *See* http://www.heraldscotland.com/reckless-banks-brought-this-financial-firestorm-down-upon-their-own-heads-1.891981.

loan portfolio as "'generally of a lower quality than its peers.'" Bloomberg further observed that HBOS suffered substantial losses on its bond investments, which totaled £2.2 billion, and losses on investments increased from £100 million to £800 million for the year.[50]

134. A January 20, 2009 analyst report from Société Générale stated:

> We would note that given the 67% drop in the share price following [RBS]'s announcements yesterday [relating to capital restructuring due to greater-than-expected credit-market related writedowns and bad-debt impairments in Q4], the loss of confidence in the bank's ability to continue to operate as a private sector player and concern over the potential ineffectiveness of the Asset Protection Scheme may prompt the UK government to fully nationalise the bank. In this instance, the shares could have very limited value, if at all.[51]

135. On March 9, 2009, Bloomberg reported that Lloyds "will cede control to the British Government in return for state guarantees covering £260 billion ($572 billion of risky assets)." The article further observed that in September 2008, Lloyds agreed to buy HBOS for roughly £7.5 billion as the British Government sought to prevent HBOS from collapsing after credit markets froze. The HBOS loan book was described as "more toxic than anyone ever dreamed."[52]

136. On November 24, 2009, Bloomberg reported that the Bank of England provided £62 billion ($102 billion) of "taxpayer-backed emergency financing" to RBS and HBOS at the height of the financial crisis in October 2008 and that "[t]he [financing] operations were kept secret until now to prevent unnerving markets." The Bank's Deputy Governor Paul Tucker was quoted as stating in evidence to the Treasury Committee in London that "'[h]ad we not done it, the cycle would have been a lot worse . . . [and that] [t]his was tough stuff, a classic lender of last resort operation.'"[53]

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[50] *See* http://www.bloomberg.com/apps/news?pid=newsarchive&sid=a4BTqdgwhPTc&refer=uk.

[51] *See* January 20, 2009 Société Générale analyst report on RBS titled "Little value left for shareholders."

[52] *See* http://www.businessday.com.au/business/lloyds-the-latest-uk-bank-to-be-rescued-20090308-8sfd.html.

[53] *See* http://www.bloomberg.com/apps/news?pid=21070001&sid=a9MjQj6MNTeA.

137. A September 9, 2008 article in *Spiegel Online* reported that WestLB was "heavily hit as a result of the US sub-prime crisis and the resulting credit crunch. Ill-advised speculation resulted in a 2007 loss of €1.6 billion—leading the bank to the very brink of insolvency." The article reported that in early 2008, a special investment vehicle was set up by WestLB's primary shareholders to "guarantee €5 billion worth of risky investments." The European Commissioner approved the public guarantee but demanded that the bank be "completely restructured to avoid failing afoul of competition regulations." The European Commissioner for Competition later warned that if WestLB did not significantly improve its restructuring package, Brussels would not approve the public assistance that the European Union had already provided to the bank. Further, if that occurred, WestLB would have to pay back €12 billion to the EU.[54]

138. On November 24, 2009, Bloomberg reported that BNP Paribas SA stated "[i]nvestors should buy the euro [ ] on speculation that capital will need to be repatriated to support German bank WestLB AG." Furthermore, two German regional savings bank groups that held a majority stake in WestLB were "prepared to let the Dusseldorf-based lender become insolvent" and that "the prospect of insolvency may force state-owned banks and savings banks outside North Rhine-Westphalia, WestLB's home state, to contribute to capital injections." Moreover, Bloomberg reported, WestLB needed "as much as 5 billion euros ($7.5 billion) in capital and may be shut by Nov. 30 unless a solution for its capital needs can be found."[55]

D. Facts and Admissions Elicited in Connection with Government Entities' Settlements with BBA Panel Banks Further Demonstrate Defendants' Misconduct.

1. The DOJ, CFTC, and FSA Found that Barclays Attempted to, and Did, Suppress USD LIBOR During the Relevant Period.

139. Findings made by the DOJ, CFTC, and FSA in connection with their investigations of Barclays' LIBOR-related misconduct illustrate that during the worldwide

[54] *See* Anne Seith, Germany's WestLB under Attack from Brussels, *Spiegel Online*, Sept. 9, 2008, available at http://www.spiegel.de/international/business/0,1518,druck-577142,00.html.

[55] *See* Matthew Brown, BNP Says Buy Euro on Speculation WestLB to Be Rescued, Bloomberg, Nov. 24, 2009, available at http://www.bloomberg.com/apps/news?pid=21070001&sid=aI9ZPZShrjWI.

"financial crisis period" of August or September 2007 through early 2009, Barclays attempted to, and did, artificially suppress USD LIBOR to mask its true financial condition.

140. The DOJ stated, "From approximately August 2007 through at least approximately January 2009, Barclays often submitted inaccurate Dollar LIBORs that under-reported its perception of its borrowing costs and its assessment of where its Dollar LIBOR submission should have been."[56] Barclays' submission of false LIBOR quotes was directed by "[c]ertain members of management at Barclays, including senior managers in the treasury department and managers of the money markets desk," who "directed that the Barclays Dollar LIBOR submitters contribute rates that were nearer to the expected rates of other Contributor Panel banks rather than submitting the proper, higher LIBORs."[57]

141. The DOJ further observed, "[F]ollowing the direction from certain members of management," Barclays personnel who submitted LIBOR quotes "submitted rates that they believed would be consistent with the submissions of other Dollar LIBOR Contributor Panel banks, or at least, that would not be too far above the expected rates of other members of the Contributor Panel."[58] Specifically, the DOJ found—based on "internal Barclays communications"—for certain time periods, "Barclays management instructed the Barclays Dollar LIBOR submitters not to be an 'outlier' compared to other Contributor Panel banks, even if Barclays contributed the highest rate; Barclays could be 'at the top of the pack' but not too far above the next highest contributor."[59]

142. The DOJ also found that while "certain managers" believed that, in employing the approach detailed above, "Barclays's submitted rates typically would be in the upper quartile of rates submitted by the Contributor Panel banks and thus excluded from the rates used in the calculation of the LIBOR fix," at other times "management did not want Barclays to submit a rate higher than other Contributor Panel banks, and instructed the Dollar LIBOR submitters to

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[56] Barclays DOJ Statement ¶ 36.

[57] *Id.*

[58] *Id.*

[59] *Id.* ¶ 37.

stay 'within the pack' of other members of the Dollar LIBOR Contributor Panel, and to submit rates 'in line' with the other contributors."[60]

143. The DOJ observed that on several occasions, "e-mail messages and phone conversations involving a Barclays Dollar LIBOR submitter reflected the LIBOR submitter's belief that, due to the pressure from Barclays management, Barclays was submitting its LIBOR contributions lower than the rate at which Barclays was borrowing or could have borrowed funds, and lower than the rate at which Barclays should have been submitting its LIBOR contributions, and thus that submitter believed s/he was contributing a false rate."[61] The DOJ's findings thus demonstrate Barclays' ***knowing misconduct*** in submitting false LIBOR quotes to the BBA.

144. In that regard, the CFTC specified, "Barclays knew that accounting for its reputational risk in its determination of LIBOR submissions was not permissible under BBA's definition and criteria."[62] Barclays' LIBOR submitters and their supervisor nonetheless "understood that they were to follow this directive regardless of market conditions or whether their assessment of Barclays' cost of obtaining unsecured funds dictated their submissions to be otherwise."[63] In other words, "Barclays' U.S. Dollar LIBOR submitters knew that, by acting upon senior management's instruction . . ., they were making improper U.S. Dollar LIBOR submissions that were management's rates and not the rates that the submitters had determined were the correct rates, *i.e.*, those that reflected Barclays' assessment of its cost of borrowing unsecured funds in the London interbank money market."[64]

145. The CFTC further found that the senior Barclays Treasury managers "frequently discussed with the U.S. Dollar LIBOR submitters and their supervisor the specific rates to be

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[60] *Id.*

[61] *Id.* ¶ 38.

[62] Barclays CFTC Order at 20.

[63] *Id.*

[64] *Id.*

submitted, in order to ensure they were in compliance with the directive."[65] During those discussions, "the senior U.S. Dollar LIBOR submitter consistently made clear that they were not setting Barclays' submissions at the rates that reflected Barclays' cost of obtaining unsecured funds."[66] The CFTC observed that those discussions "were memorialized in multiple recorded telephone calls and emails during the more than 18-month financial crisis period."[67]

146. On November 30, 2007, for example, a "senior Barclays Treasury manager" spoke with Barclays' "senior U.S. Dollar LIBOR submitter," who was "seeking guidance on his submissions."[68] During that conversation, the senior Treasury manager "related his understanding that senior management had discussed the issue and directed them to continue to 'stick within the bounds[,] so no head above [the] parapet.'"[69] The Treasury manager also told the LIBOR submitter "that they would have to deal with the settings, meaning how to make LIBOR submissions per this directive, on 'a day-to-day-basis.'"[70]

147. The CFTC further recounted that in early December 2007, Barclays' senior U.S. Dollar LIBOR submitter "emailed his supervisor stating that he submitted Barclays' one month LIBOR at 5.30 percent, which was four basis points over the next highest submission and almost five basis points over the LIBOR fixing" but "was well below the 5.40 percent that Barclays was paying (*i.e.*, asking) to borrow funds in the market, and that 'given a free hand [he] would have set around 5.45%.'"[71] The submitter continued, "'My worry is that we (both Barclays and the contributor bank panel) are being seen to be contributing patently false rates. We are therefore being dishonest by definition and are at risk of damaging our reputation in the market and with the regulators.'"[72]

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[65] *Id.*

[66] *Id.*

[67] *Id.*

[68] *Id.* at 21.

[69] *Id.* (alterations in original).

[70] *Id.*

[71] *Id.* at 22 (alteration in original).

[72] *Id.*

148. The CFTC found that Barclays' misconduct in knowingly submitting false LIBOR quotes stemmed from its desire "to protect [its] reputation against what it believed were negative and unfair media and market perceptions that Barclays had a liquidity problem based in part on its high LIBOR submissions."[73]

149. The DOJ similarly observed that Barclays' improper submissions "began in approximately late August 2007," shortly after Barclays "twice drew on the Bank of England's emergency liquidity facility (known as the 'window'), borrowing approximately £1.6 billion the second time."[74] The DOJ further explained:

> News articles about the withdrawals in late August 2007 noted a decline in Barclays's share price and questioned Barclays's liquidity position, while Barclays explained publicly that the visits to the window were due to technical glitches. Meanwhile, because of the onset of the financial crisis, there was diminished liquidity in funding markets, and Barclays set certain of its LIBOR submissions relatively high compared to other Contributor Panel banks. In early September 2007, Barclays received negative press coverage concerning Barclays's high LIBOR submissions in Sterling, Euro, and Dollar. A news article questioned Barclays's liquidity position, in light of Barclays's high LIBOR submissions and its visits to the Bank of England's window, and noted that Barclays's share price had fallen.[75]

150. Senior managers at Barclays "expressed concern about the negative publicity."[76] Managers on Barclays' money-markets desk and in its Treasury department "who gave the instruction to submit lower LIBORs, which resulted in improperly low LIBOR submissions," aimed "to avoid inaccurate, negative attention about Barclays's financial health as a result of its high LIBOR submissions relative to other banks."[77] They "wanted to prevent any adverse conclusions about Barclays's borrowing costs, and more generally, its financial condition, because they believed that those conclusions would be mistaken and that other Contributor Panel banks were submitting unrealistically low Dollar LIBORs."[78]

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[73] *Id.* at 19.

[74] Barclays DOJ Statement ¶ 39.

[75] *Id.*

[76] *Id.* ¶ 40.

[77] *Id.*

[78] *Id.*

151. Because those managers "sought to avoid what they believed would be an inaccurate perception that Barclays was not in good financial shape when compared to its peers," Barclays "engaged in this misconduct in order to reduce the reputational risk associated with proper, higher LIBOR submissions."[79] In other words, the DOJ explained—referencing Barclays employees' comments in internal communications—"the purpose of the strategy of under-reporting Dollar LIBORs was to keep Barclays's 'head below the parapet' so that it did not get 'shot' off."[80]

152. In that regard, the CFTC found, a Barclays senior compliance officer stated in an internal e-mail to several levels of Barclays' senior management that he had informed the FSA "that Barclays believed that LIBOR submissions by the panel banks were distorted due to market illiquidity; that Barclays had been consistently the highest or one of the two highest submitters but was concerned to go higher given the negative media reporting about Barclays; that Barclays had concerns about the trillions of dollars of derivatives fixed off LIBOR; and that there were 'problematic actions' by some banks."[81] That senior compliance officer did not, however, inform the FSA "that Barclays was making its LIBOR submissions based on considerations of negative market or press perceptions of Barclays or that its LIBOR submitters' assessments of the appropriate rates for submission were being altered to adhere to the directive to be below 'the parapet.'"[82]

153. On another occasion, following an April 16, 2008 *Wall Street Journal* article speculating "that panel member banks were making LIBOR submissions lower than what they were actually paying for funds to prevent the market from concluding that the banks were desperate for cash," a senior Barclays Treasury manager informed the BBA "that [Barclays] had not been reporting accurately," although he further noted "Barclays ***was not the worst offender***

[79] *Id.* ¶ 40.

[80] *Id.*

[81] Barclays CFTC Order at 22.

[82] *Id.*

of the panel bank members."[83] On that call, the Treasury manager stated, "We're clean, but we're dirty-clean, rather than clean-clean."[84] The BBA representative responded, "[N]o one's clean-clean."[85] The CFTC's findings accord with those by the FSA, which observed, "Barclays believed that the submissions of other contributing banks were inappropriate during the financial crisis."[86]

154. The CFTC Order further specifies, "Senior Barclays Treasury managers provided the submitters with the general guidance that Barclays' submitted rates should be within ten basis points of the submissions by the other U.S. Dollar panel banks to be in compliance with the directive."[87]

155. Additionally, the DOJ Statement observes that "[o]n some occasions, . . . the manipulation of Barclays's submissions affected the fixed rates."[88]

156. The DOJ also recounted Barclays' statements to regulators that other LIBOR Panel banks were submitting "false and dishonest" quotes to the BBA.

157. The DOJ specified, "During approximately November 2007 through approximately October 2008, certain employees at Barclays sometimes raised concerns with individuals at the BBA, the [FSA], the Bank of England, and the Federal Reserve Bank of New York concerning the diminished liquidity available in the market and their views that the Dollar LIBOR fixes were too low and did not accurately reflect the market."[89] Those employees, the DOJ found, "attempted to find a solution that would allow Barclays to submit honest rates without standing out from other members of the Contributor Panel, and they expressed the view that Barclays could achieve that goal ***if other banks submitted honest rates***."[90]

[83] *Id.* at 23 (emphasis added).

[84] *Id.*

[85] *Id.*

[86] Barclays FSA Final Notice ¶ 117.

[87] Barclays CFTC Order at 20.

[88] Barclays DOJ Statement ¶ 41.

[89] *Id.* ¶ 42.

[90] *Id.* (emphasis added).

158. On November 29, 2007, for instance, "a Barclays manager ('Manager-1') contacted a representative of the BBA ('BBA Representative-1')" and stated "that Dollar 'LIBORs are being set lower than where they ought to be.'"[91] "Manager-1" explained to "BBA Representative-1" that LIBOR panel banks were "submitting rates that are too low because 'banks are afraid to stick their heads above the parapet and post higher numbers because of what happened to [Barclays] when [Barclays] did. You get shot at.'"[92] "Manager-1," the DOJ further observed, "named certain other banks that s/he believed were submitting 1-month Dollar LIBORs lower than where those banks could get funds."[93]

159. Additionally, the DOJ recounted, "[o]n December 4, 2007, a Barclays LIBOR submitter sent an internal e-mail raising concerns about the Dollar LIBOR rates submitted by Contributor Panel Banks, including Barclays."[94] The submitter "stated that s/he was submitting 1-month Dollar LIBOR lower than s/he was paying, and lower than s/he would have set if 'given a free hand.'"[95] The submitter further stated "that s/he was worried that the Contributor Panel banks' submissions, including Barclays's, were false and dishonest."[96]

160. The DOJ noted, however, Barclays' communications to regulators "were not intended and were not understood as disclosures through which Barclays self-reported misconduct to authorities."[97] Indeed, following those communications, "Barclays continued improperly to take concerns about negative publicity into account when making its submissions."[98] Moreover, "on other occasions, those employees did not provide full and accurate information during their conversations with these external parties."[99]

[91] *Id.* ¶ 43.

[92] *Id.* (alterations in original).

[93] *Id.*

[94] *Id.* ¶ 45.

[95] *Id.*

[96] *Id.*

[97] *Id.* ¶ 42.

[98] *Id.*

[99] *Id.*

161. The findings by the CFTC and the FSA also indicate Barclays knew, when determining the LIBOR quotes it would submit to the BBA on a given day, the quotes its fellow LIBOR panel banks intended to submit.

162. The FSA observed, for example, that on November 28, 2007, a LIBOR submitter at Barclays "stated in an internal email that 'LIBORs are not reflecting the true cost of money. I am going to set 2 and 3 months, 5.13 and 5.12 probably at the top of the range of rates set by libor contributors, although brokers tell me that [Panel Bank 7] is going to set at 5.15 for both (up 8.5 and 10 from yesterday). The true cost of money is anything from 5-15 basis points higher.'"[100]

163. Additionally, the CFTC cited a November 29, 2007 telephone discussion involving Barclays' U.S. Dollar LIBOR submitters—as well as their supervisor, who convened the call—and the senior Barclays Treasury managers, during which "[t]he supervisor said if the submitters submitted the rate for a particular tenor at 5.50, which was the rate they believed to be the appropriate submission, Barclays would be twenty basis points above 'the pack' and 'it's going to cause a shit storm.'"[101] In response to the supervisor's request "that the issue be taken 'upstairs,' meaning that it should be discussed among more senior levels of Barclays' management," the most senior Barclays Treasury manager "agreed that he would do so."[102] The group decided to set Barclays' LIBOR submission for that day "at the same level as another bank, a rate of 5.3, which was, again, not at the rate the submitters believed to be appropriate for Barclays."[103]

164. Similarly, on March 19, 2008, one Barclays LIBOR submitter "instructed another to reduce Barclays' submissions during a telephone conversation: '*just set it where everyone else sets it, we do not want to be standing out*'."[104]

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[100] Barclays FSA Final Notice ¶ 117 (italics and alteration in original).

[101] Barclays CFTC Order at 21.

[102] *Id.*

[103] *Id.*

[104] Barclays FSA Final Notice ¶ 123 (italics in original).

165. Those findings indicate LIBOR panel banks, either directly or through intermediaries, informed each other of the quotes they were going to submit before they submitted them. Without such collaboration, Barclays could not be sure the quote it intended to submit would fall "within the pack" or, more specifically, "within ten basis points of the submissions by the other U.S. Dollar panel banks," as Barclays senior Treasury managers had directed. Moreover, it is highly unlikely, if not impossible, that Barclays simply could have predicted its fellow LIBOR panel banks' quotes based on their quotes from the previous day (which were published), because LIBOR quotes often differed markedly from day to day. For instance, the FSA observed that on November 29, 2007, "all the contributing banks' submissions for one month US dollar LIBOR increased by a range of 35 to 48 basis points."[105]

2. Materials Released, and Testimony Provided, in the Wake of the Barclays Settlements Confirm—and Amplify—the Agencies' Findings.

166. The Barclays settlements, particularly the factual findings and admissions they entailed, precipitated a management shakeup at the bank. On July 1, 2012, Barclays announced the resignations, effective immediately, of its Chief Executive Officer Robert ("Bob") Diamond and Chief Operating Officer Jerry del Missier, and the next day announced the resignation of its Chairman Marcus Agius.

167. Shortly after those revelations, Bloomberg reported that Diamond's resignation "underscores the disconnect between the market's perception of bank borrowing costs and the benchmark for $360 trillion of global securities."[106] The article specified that Barclays went from reporting in January 2012 that it could "borrow for three months at interest rates that were on average above other banks" to reporting it could "borrow more cheaply than its peers," even though, according to data compiled by Bloomberg, "the cost of insuring the London-based firm's debt using credit-default swaps rose 33 percent." Bloomberg further stated, "The contrast between banks' daily submissions for Libor and other measures of their creditworthiness shows

[105] *Id.* ¶ 118.

[106] Paul Armstrong, "Diamond's Exit Shows Libor Only What Each Bank Says It Is," Bloomberg, July 3, 2012.

why regulators from Europe to the U.S. are beginning to fine them for manipulating the market for short-term rates." The article quoted a senior rates specialist at ING Groep NV as stating, "After the Barclays admission, we have proof that Libor is not a reliable benchmark."

168. Following in the wake of the Barclays settlements, documents and other materials released from several sources—including Barclays, the BBA, the Federal Reserve Bank of New York, and the Bank of England—as well as testimony provided to the British Parliament or the U.S. House of Representatives by key players at Barclays and other institutions, corroborated the findings made in connection with the Barclays settlements and offered further insight into the manipulation of LIBOR.

169. In testimony before the British Parliament on July 16, 2012, for example, former Barclays CFO Jerry del Missier admitted to directing rate submitters at Barclays to submit false LIBOR quotes to the BBA, which former CEO Bob Diamond had instructed him to do.

170. Del Missier testified that on October 29, 2008, Diamond "said that he had a conversation with Mr [Paul] Tucker[, Deputy Governor] of the Bank of England, that the Bank of England was getting pressure from Whitehall around Barclays—the health of Barclays—as a result of LIBOR rates, that we should get our LIBOR rates down, and that we should not be outliers." Del Missier "passed the instruction, as [he] had received it, on to the head of the money markets desk." Specifically, he "relayed the contents of the conversation that [he] had with Mr Diamond, and fully expected that the Bank of England's views would be incorporated in the LIBOR submissions," i.e., "[g]iven that Barclays was [submitting] high rates," del Missier "would have expected that taking that into account would have resulted in lower submissions."

171. Del Missier equivocated when pressed as to whether he believes the submission of artificially low LIBOR quotes was illegal, though he conceded that the Barclays DOJ Statement characterized Barclays' "manipulating its submissions for benchmark interest rates in order to benefit its trading positions and the media's perception of the bank's financial health" as "illegal activity." When asked when he first realized "that [he] had authorised, knowingly or

unknowingly, illegal activity, found to be illegal by the US Department of Justice," del Missier stated, "In the early months of 2010."

172. Moreover, though del Missier testified that in late October 2008, making false LIBOR submissions "did not strike [him] as improper," when asked whether he now agrees with the DOJ, del Missier responded, "I am certainly not going to disagree with the Justice Department." In response to the committee chairman's follow-up question—"Does that mean that you agree with it?"—del Missier conceded, "I agree with it."

173. Additionally, contrary to del Missier's testimony that Diamond's instruction to him emanated from the Bank of England, Paul Tucker, Deputy Governor of the Bank, has denied telling Diamond to have Barclays submit lower LIBOR quotes.

174. In testimony before Parliament on July 9, 2012, Tucker recounted that, in speaking with Diamond on the October 29, 2008 call referenced above, Tucker "wanted him to be sure that the senior management of Barclays was overseeing the day-to-day money-market operations and treasury operations and funding operations of Barclays so that Barclays' money desk did not inadvertently send distress signals." Tucker added, "In actual paying up for money in terms of what you borrow, you do not need to be at the top of the market all of the time. It is very important not to come across as desperate. ***That is not a point about LIBOR submissions, where people should just obey the rules.***" (Emphasis added). A committee member then asked, "But doesn't the danger of that call being misinterpreted, either by Mr Diamond or its file note being misinterpreted later by Mr del Missier, lie in the fact that you and other participants in the Money Markets Liaison Group were already aware at least a year earlier that there was suspicion on behalf of some of the participants that rates were not being reported accurately?" Tucker responded, in part, "[I]t was not remotely in my mind during this conversation that I could be misinterpreted, either by Bob Diamond or by anybody else."

175. Internal documents released by the Federal Reserve likewise demonstrate Barclays' misconduct and further indicate LIBOR panel banks communicated about their LIBOR submissions before providing them to the BBA. For example, during an October 24, 2008

telephone conversation with a representative of the Federal Reserve Bank of New York (as recounted in a transcript released by the New York Fed), a Barclays employee stated "three-month libor ***is going to come in at*** 3.53." (Emphasis added). The Barclays employee further explained to the Fed representative, "[I]t's a touch lower than yesterday's but please don't believe it. It's absolute rubbish." Later in the call the Barclays employee observed, "[R]ecently you've had certain banks who I know have been paying 25 basis points over where they've set their libors. . .aah just the other day there was one bank who was paying 3.75, he sets his libor at 3.70." (Ellipsis in original).

3. Findings by Government Entities in Connection with Settlements with UBS Demonstrate that UBS Submitted False USD LIBOR Quotes During the Relevant Period.

176. On December 19, 2012, the DOJ, CFTC, FSA, and FINMA announced settlements with UBS arising from the bank's attempted and actual manipulation of LIBOR and other benchmark rates. The DOJ also disclosed the filing of a criminal complaint against two former UBS employees. In connection with the settlements, which collectively obligated UBS to pay approximately $1.5 billion, the agencies issued findings detailing UBS's misconduct.

177. The agencies found that during the financial crisis, members of UBS management directed that, in determining the bank's submissions in USD LIBOR as well as LIBOR for other currencies, LIBOR submitters either "err on the low side" or aim to fall in "the middle of the pack."[107]

[107] UBS DOJ Statement ¶ 100; *see also, e.g.*, UBS FSA Final Notice ¶ 22 ("After 9 August 2007, and in reaction to increased media scrutiny of the financial standing of banks and banks' LIBOR submissions during the financial crisis, UBS issued directives to its LIBOR submitters intended to: '*protect our franchise in these sensitive markets*'. These informal directives were disseminated by UBS's Group Treasury and Asset and Liability Management [ALM] Group about the approach to LIBOR submissions."); UBS CFTC Order at 41 ("Certain Group Treasury and ALM managers issued the broad directions without ascertaining or requiring the Trader-Submitters to ascertain the costs of borrowing unsecured funds in the relevant markets or ensuring that such directions were in accord with the definitions and criteria of the benchmark interest rates. . . . When the submitters followed the directions, they impacted UBS's submissions. As a result, at times during the financial crisis, UBS's submissions did not accurately or solely reflect or relate to UBS's assessment of the costs of borrowing funds in the relevant interbank markets."); UBS FINMA Summary Report at 8 ("Evidence suggests that . . . GT [Group Treasury] and Asset and Liability (ALM) employees gave improper guidance on UBS's LIBOR submissions on a number of occasions . . . .").

178. Notwithstanding the long-established requirements with respect to determining LIBOR quotes, from early August 2007 to at least April 2009, "certain UBS managers issued directions for making UBS benchmark interest rate submissions in order to protect against what UBS perceived as unfair and inaccurate negative public and media perceptions about UBS."[108] Specifically, "certain UBS managers and senior managers" in the bank's Group Treasury and Asset and Liability Management (ALM) groups "directed that UBS LIBOR submitters should either 'err on the low side' in determining UBS's submissions or should make submissions that would be in 'the middle of the pack' of the other Contributor Panel banks."[109] Those Group Treasury and ALM managers "did not provide any guidance to [the] submitters as to how to implement these directions, other than simply to follow them."[110]

179. The instructions "were issued, at least in significant part, because of concerns that if UBS submitted higher LIBOR rates relative to other banks, UBS could attract negative attention in the media" (which, during "some" period of time, UBS personnel considered "unjustified").[111] UBS "sought to avoid negative media attention and, relatedly, sought to avoid creating an impression that it was having difficulty obtaining funds."[112] To the extent those directions from UBS management "were motivated by reputational concerns," they "were inconsistent with the definition of LIBOR."[113] Moreover, those directions "influenced the formulation of UBS's LIBOR submissions during some periods of time."[114]

180. The "err on the low side" directive began on August 9, 2007, when an ALM senior manager in Zurich sent an e-mail directing USD LIBOR and Euro LIBOR submitters at UBS "to 'err on the low side' compared to the LIBOR submissions of other Contributor Panel

[108] UBS CFTC Order at 4; *see also* UBS DOJ Statement ¶¶ 124, 131.

[109] UBS DOJ Statement ¶ 100.

[110] UBS CFTC Order at 41.

[111] UBS DOJ Statement ¶ 100.

[112] *Id.*

[113] *Id.*

[114] *Id.*

banks, in order to protect [UBS]'s reputation."[115] That instruction stemmed from media reaction after UBS, earlier that day, "increased its overnight-rate U.S. Dollar LIBOR submission by an unusually high amount from the day before."[116]

181. Following the "unusual" submission, a Bloomberg reporter "contacted UBS to ask for comment . . . and told UBS that the reporter intended to discuss the jump in connection with stories regarding the collapse of the commercial paper market."[117] The reporter noted UBS and another bank "had been 'hit the worst' and asked for an explanation"; the reporter further indicated "this was a 'huge story.'"[118]

182. The Bloomberg reporter's inquiry "caused concern" within UBS, "especially because UBS was scheduled to announce its quarterly results the following week."[119] The UBS press office forwarded the reporter's e-mail to a senior manager in the bank's Group Treasury department, observing: "Given that we are announcing our results next week this will need urgent attention."[120] The senior manager in Group Treasury "was concerned about these events and asked the head of ALM in Zurich to look into the matter."[121] The head of ALM, in turn, "concluded that the UBS overnight rate LIBOR submission was in fact higher than it should have been" and he "was concerned that the public and press could interpret this high submission as an indication that the bank was having trouble funding itself, when in fact it was not."[122] The head of ALM therefore "determined that UBS should be submitting LIBORs 'on the low side' relative to other panel banks' submissions," and he "memorialized this decision in an August 9, 2007 email to a senior manager in Group Treasury in Stamford[, Connecticut], the manager of the derivatives trading desk that submitted the majority of UBS's LIBOR contributions, and

[115] *Id.* ¶ 102.

[116] *Id.* ¶ 103.

[117] *Id.*

[118] *Id.*

[119] *Id.* ¶ 104.

[120] *Id.*

[121] *Id.*

[122] *Id.* ¶ 105.

others."[123] The ALM head's e-mail stated, "[I]t is highly advisable to err on the low side with fixings for the time being to protect our franchise in these sensitive markets. Fixing risk and [profit and loss] thereof is secondary priority for now."[124]

183. That direction "stemmed from a desire to ensure that UBS's LIBOR submissions did not convey to the media or market what UBS believed to be an inaccurate message about UBS's financial stability or otherwise harm UBS's reputation in the increasingly uncertain environment created by the financial crisis."[125] Indeed, "[t]he idea was that, going forward, UBS's submissions were to portray a view that UBS was more creditworthy than other panel banks and, therefore, UBS should not make higher submissions and be an outlier as compared to other panel banks."[126]

184. Managers in UBS's Group Treasury and ALM groups did not take "any steps to ensure that the 'err on the low side' direction for making LIBOR submissions complied with the BBA's definition and criteria for making LIBOR submissions or that it related to UBS's costs of borrowing in the London interbank market."[127]

185. UBS "promptly disseminated the direction to err on the low side."[128] On August 9, 2007, a UBS rates manager (whom the CFTC identified as "Rates Manager A") "confirmed that the necessary coordination was in place: 'We have already co-ordinated our efforts with [Senior Rates/STIR Manager][129] and [U.S. Dollar Trader-Submitter 1] on the usd libors will be speaking to [U.S. Dollar Trader 1] and [Euro Trader 1] will be liaising with [Senior STIR Manager B] on the eurolibors before our numbers are input.'"[130]

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[123] *Id.*

[124] *Id.* The DOJ explained that the e-mail's references to "fixing risk" and profit and loss "reflect an awareness that others at UBS were manipulating LIBOR to benefit trading positions." *Id.* ¶ 105 n.16.

[125] UBS CFTC Order at 43.

[126] *Id.*

[127] *Id.*

[128] *Id.*

[129] "STIR" stands for "Short Term Interest Rate."

[130] UBS CFTC Order at 43.

186. U.S. Dollar Trader 1 in Zurich and U.S. Dollar Trader-Submitter 1 in London "discussed the 'err on the low side' direction, and their submissions immediately started reflecting the directions."[131] On August 10, 2007, for example, the traders engaged in the following exchange:

> U.S. Dollar Trader 1: "o;/n just trading way lower . . . so I would go for a pretty low run . . . **aim should really be to be on the lower side of range"**
>
> U.S. Dollar Trader-Submitter 1: "just looking for early indications for o/n 1w and 2wks – understand mkt dropping fast – so early indics for now then true [levels] at 11 am – pls"
>
> U.S. Dollar Trader 1: "o/n would go for 5.70 . . . 1wk 5.70 . . . 2wk 5.60 . . . **this seems probably a tad low right now, but recon thats what we should try to be**"
>
> U.S. Dollar Trader-Submitter 1: **"kk – will check back at 11[when the submissions had to be made] – as you say always want to err on the low side** – thks for colour – may even swap ideas about 1m 2m and 3 mo with you too in curect climate – sure few weeks down the road then will only need to chat about v short dates ie <1mo – appreciate colour"
>
> U.S. Dollar Trader 1: "np at all . . . we just dont want to give the market a wrong impression . . . we not struggling to get cash . . . so therefore dont want to be on the highs of libors"[132]

187. On August 14, 2007, U.S. Dollar Trader 1 "confirmed again, 'my indications are deliberately on the low side…' and U.S. Dollar Trader-Submitter 1 agreed, 'y[es] pls err on the side of caution as before – once teh [sic] mkt normalizes…then we can adj accordingly….'"[133]

188. Additionally, on September 3, 2007, "U.S. Dollar Trader 1 explained to an ALM manager his understanding of why UBS wanted to 'err on the low side,' stating that UBS did not want 'to be seen to pay higher or at libor in the market to avoid trouble.'"[134] And on September 5, 2007, "U.S. Dollar Trader-Submitter 1 explained he was following the 'err on the low side' direction to his supervisor, Senior Rates Manager C":

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[131] *Id.*

[132] *Id.* at 44.

[133] *Id.*

[134] *Id.*

> "fyi libor has been fuctioning [sic] for many years – current turbulance [sic] and american home owners exposure to libor may trigger further questions – since the mkt dislocation I am now keeping a record of UBS libor fixings vs the implied rates – **we are fixing on the low side of all other banks in the libor panel in the 4- 12 mo period by several bps** – and we are still fixing 12 – 15 over implied rates – **I can justify my fixings each day if asked** – I se [sic] longer dated libors even lower however the rest of he [sic] mkt continue to call libors higher than UBS – **we should be protected from moral hazard as a bank. Short rates coming grom [sic] Zurich now – again asa [sic] bank we are erring on the low side."**[135]

189. UBS managers subsequently "monitored how UBS's LIBOR submissions sent signals to the markets and the press about UBS's ability to obtain funds."[136] As part of their "daily internal calls about liquidity and funding as the financial crisis intensified," UBS managers "received internal analyses about UBS's LIBOR submissions relative to other panel banks."[137] Specifically, "UBS ALM Manager A circulated spreadsheets about the panel banks' submissions for U.S. Dollar, Euro, Sterling, Swiss Franc and Yen LIBOR, showing how UBS compared to the other banks."[138] In a September 4, 2007 e-mail, for example, "ALM Manager A wrote, 'For those interested, this new tool shows where each bank on the Libor fixing panel quoted their offer level in today's fixing. Should give some insights into the funding situation at our peers. Note Barclays are consistently amongst the highest contributors and UBS are often the lowest.'"[139] On September 10, 2007, the ALM manager wrote "'we're still contribute [sic] the lowest rates in most currencies.'"[140] Notably, "the spreadsheets and 'tools' provided to the managers did not include information about UBS's actual transactions in the relevant unsecured interbank cash markets or any other information relating to costs of borrowing in those markets."[141]

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[135] *Id.*

[136] *Id.* at 45.

[137] *Id.*

[138] *Id.*

[139] *Id.*

[140] *Id.*

[141] *Id.*

190. UBS's "err on the low side" directive "generally applied to UBS's U.S. Dollar LIBOR submissions for the rest of 2007."[142] The bank's submissions "moved to the lowest quartile of the panel submissions almost immediately after the issuance of the August 9, 2007 direction and, in some tenors, often remained in the lowest quartile for the rest of the year and through March 2008."[143] Indeed, UBS's USD LIBOR submissions continued to fall "on the low side" of the panel banks' submissions into April 2008, "when UBS was submitting its 3-month U.S. Dollar LIBOR contribution below the rates it was paying to obtain unsecured funding at that maturity, such as by issuing commercial paper."[144] Commenting on that disparity during an April 10, 2008 electronic chat, a UBS derivatives trader in London stated to the senior manager heading ALM, "if we are [issuing commercial paper] at 2.81% and that is 3m libor +10 . . . why aren't we putting our 3m rate in at 2.81% for libors [?]"[145] The ALM senior manager responded, "we should," to which the trader replied, "but then [Group Treasury] will rip our boys a new one for being the highest bank in the poll."[146] After August 9, 2007, "UBS's LIBOR submissions remained generally in the lower half of the Contributing Panel banks' contributions until April 2008."[147]

191. The "err on the low side" directive ceased in the wake of *The Wall Street Journal*'s April 16, 2008 article reporting that USD LIBOR panel banks, including UBS, "were routinely submitting inaccurately low LIBORs in order to make themselves appear more creditworthy," as well as the BBA's announcement the same day that "it would expel any banks from the Contributor Panel if it found that they were deliberately making inaccurate LIBOR

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[142] *Id.*

[143] *Id.* at 46.

[144] UBS DOJ Statement ¶ 110.

[145] *Id.*

[146] *Id.*

[147] *Id.* ¶ 111.

submissions."[148] The next day, "all of UBS's U.S. Dollar LIBOR submissions rose substantially," as they did the following day [April 18, 2008]."[149]

192. Following the *Journal* article and the BBA announcement, the "err on the low side" instruction "was initially replaced with a new effort to make LIBOR submissions 'in the middle of the pack' of the Contributing Panel banks."[150] In that regard, on April 17, 2008, a UBS advisor "tasked with advising the U.S. Dollar submitter each day" sent an e-mail to the USD LIBOR submitter "informing him/her that 'the guidance I got from my management with regards to libors is that we should aim to be in the middle of the pack . . . ([Group Treasury] got on their back again as well).'"[151] "Immediately" after that direction was issued on or about April 17, 2008, "UBS's LIBOR submissions were in the middle of the submissions of the Contributor Panel banks for the next several days."[152]

193. Notably, on May 21, 2008, in response to a *Wall Street Journal* reporter's e-mail inquiry to UBS, "why back in mid-April [2008] UBS had been 'paying 12 basis points for CP [commercial paper] more than it was posting as a Libor quote?'", the senior manager heading ALM forwarded a proposed answer to the Group Treasury senior manager in Stamford, Connecticut: 'the answer would be 'because the whole street was doing the same and because we did not want to be an outlier in the libor fixings, just like everybody else."[153]

194. Communications reflecting the "middle of the pack" approach "continued in late 2008 and early 2009."[154] Moreover, "[t]he directive to submit LIBOR contributions to be in the middle of the pack of other banks' anticipated submissions was well known to certain LIBOR submitters and their managers."[155]

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[148] *Id.* ¶ 114.

[149] *Id.*

[150] *Id.* ¶ 115.

[151] *Id.*

[152] *Id.* ¶ 116.

[153] *Id.* ¶ 117.

[154] *Id.* ¶ 124.

[155] *Id.* ¶ 129.

195. After briefly discontinuing its "middle of the pack" directive, by June 17, 2008, "in reaction to being a high outlier on the U.S. Dollar panel," UBS "decided to return to the 'middle of the pack.'"[156] That day, "Senior STIR Manager C went to the trading floor in Zurich and directed that UBS's LIBOR submissions be lowered so that UBS would be in 'the middle of the pack' of the submitting banks."[157] Also that day, "U.S. Dollar Trader-Submitter 3 discussed with ALM Manager B the need to implement the 'middle of the pack' direction quickly and that the 'middle of the pack' direction would be in place 'until further notice.'"[158]

196. From June 17 through December 2008, "UBS was in the middle of the pack virtually every day, with very little deviation in its submissions."[159] Indeed, UBS "remained in the middle of the pack even after October 16, [2008], when it received approximately $59 billion in funds from the Swiss government and the Swiss National Bank and borrowed over $77 billion from the various liquidity programs of the Federal Reserve Bank."[160] UBS "continued to submit in the middle of the pack throughout at least the first half of 2009, despite UBS's February 10, 2009 announcement of an 8.1 billion Swiss Franc loss for the fourth quarter of 2008."[161]

197. In sum, UBS "knew that concerns about reputation or perceived inaccurate negative market or press reports were not legitimate or permissible factors on which to base [its] daily LIBOR and other benchmark interest rate submissions."[162] Despite that understanding, UBS "at times" during the financial crisis "made its U.S. Dollar LIBOR submissions and other

[156] *Id.*

[157] *Id.*; *see also* UBS DOJ Statement ¶ 120 (finding that "[d]uring the week of June 16, 2008," a Zurich-based UBS senior manager "directed U.S. Dollar LIBOR submitters to lower their submissions over the next three days 'to get in line with the competition' because, by contributing LIBOR submissions closer to CD and CP [commercial paper] issuance levels, UBS was becoming an outlier relative to other Contributor Panel banks").

[158] UBS CFTC Order at 50.

[159] *Id.* at 51.

[160] *Id.*

[161] *Id.* at 51-52. The DOJ found that the "middle of the pack" directive lasted until about April 2009. The DOJ specified that for "approximately the next 10 months" after the week of June 16, 2008, UBS's three-month USD LIBOR submissions "were identical to the published LIBOR fix, and largely consistent with the published LIBOR fix in the other tenors." UBS DOJ Statement ¶ 122.

[162] UBS CFTC Order at 52.

benchmark interest rate submissions in accordance with Group Treasury and ALM managers' directions, and not in accordance with the relevant definitions and criteria for those rates."[163] Those submissions "were knowingly false because such submissions did not reflect solely UBS's assessment of the costs of borrowing unsecured funds in the relevant interbank market at that time."[164] The submissions thus "constituted false, misleading or knowingly inaccurate reports that affected or tended to affect LIBOR, Euribor or Euroyen TIBOR."[165]

198. Moreover, UBS "fail[ed] to take reasonable care to organise and control its affairs responsibly and effectively with adequate risk management systems, in relation to its LIBOR and Euribor submissions process."[166] The duration and extent of UBS's wrongdoing were "exacerbated by these inadequate systems and controls."[167] Indeed, from January 1, 2005 to August 2008, "UBS had no systems, controls or policies governing the procedures for making LIBOR submissions."[168]

4. <u>RBS Has Admitted Engaging in LIBOR-Related Manipulation.</u>

199. On or about February 5, 2013, RBS executed a deferred prosecution agreement with the criminal fraud section of the DOJ relating to LIBOR.

200. Under the terms of that agreement, RBS admitted various facts relating to its involvement in fraudulent and collusive practices relating to LIBOR submissions. The United States filed a two-count criminal information charging RBS with wire fraud and price fixing in connection with RBS's conduct and agreed to defer prosecution of that case pursuant to its agreement with RBS. Additionally, RBS Securities Japan Ltd. pleaded guilty to one count of wire fraud for its participation in fraudulent and collusive practices relating primarily to manipulation of Yen LIBOR.

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[163] *Id.*

[164] *Id.*

[165] *Id.*

[166] UBS FSA Final Notice ¶ 25.

[167] *Id.*

[168] *Id.* ¶ 26.

5. Rabobank Has Admitted Engaging in LIBOR-Related Manipulation.

201. On October 29, 2013, Rabobank settled LIBOR investigations by the DOJ, the CFTC, the FCA, and the DNB. The CFTC found that Rabobank's manipulation of USD LIBOR, Pound Sterling LIBOR, Yen LIBOR, and Euribor was unlawful, and Rabobank paid a $475 million fine. Rabobank also entered into a deferred prosecution agreement with the DOJ as a result of charges of wire fraud based on the manipulation of LIBOR and Euribor and paid a $235 million fine. As part of that settlement, Rabobank admitted that more than two dozen of its traders participated in ongoing and pervasive manipulation of USD and Yen LIBOR to favor its day-to-day trading positions.[169] Rabobank admitted that by falsely representing that its LIBOR submissions were based on its perceived costs of borrowing, it engaged in a deceptive course of conduct and its LIBOR submissions were false or misleading.[170]

6. Lloyds

202. On July 28, 2014, Lloyds entered into settlements with the DOJ, the CFTC, and the FCA arising from LIBOR manipulation, and agreed to pay an $86 million criminal penalty to the DOJ and $105 million to the CFTC.

203. Consistent with the Schwab Plaintiffs' allegations in this Complaint, the CFTC found:

> During the global financial crisis in 2008, HBOS experienced serious funding and liquidity issues and was perceived by the market to be in financial trouble. By the middle of 2008, certain HBOS managers recognized that market participants viewed LIBOR submissions as a reflection of a panel bank's liquidity and financial viability. In response, the supervisor at HBOS LIBOR submitters directed the submitters to make the bank's U.S. Dollar and Sterling LIBOR submissions at rates that ensured it would not be an outlier relative to the other panel banks' LIBOR submissions. Accordingly, from late 2008 through the end of the year, HBOS's U.S. Dollar and Sterling LIBOR submissions did not accurately or solely reflect or relate to HBOS's assessment of the cost of borrowing funds in the relevant interbank markets.[171]

[169] Rabobank Deferred Prosecution Agreement

[170] Rabobank DOJ Statement ¶ 97.

[171] Lloyds CFTC Order at 14.

204. In the wake of the April 16, 2008 *Wall Street Journal* article referenced in ¶ 191 above and the BBA's subsequent inquiry into the integrity of the LIBOR fixing, on May 6, 2008, an HBOS senior manager, in an e-mail to two other HBOS senior managers and other HBOS personnel, including the senior manager of the LIBOR submitters, reported: "[I]t will be readily apparent that in the current environment no bank can be seen to be an outlier. The submissions of all banks are published and we could not afford to be significantly away from the pack."[172]

205. On August 8, 2008, the same HBOS Senior Manager circulated to HBOS managers and senior managers a presentation in which he stated, among other things:

> As a bank we are extremely careful about the rates we pay in different markets for different types of funds as paying too much risks not only causing a re-pricing of all short term borrowing but, more importantly in this climate, **may give the impression of HBOS being a desperate borrower and so lead to a general withdrawal of wholesale lines**.[173]

206. In the midst of the financial crisis, and as HBOS's financial status worsened, "the HBOS U.S. Dollar LIBOR Submitter began to increase his U.S. Dollar LIBOR submissions because he believed his submitted rates represented a reasonable attempt to approximate the rates at which HBOS would be able to borrow such funds."[174] On September 24, 2008, for example, the HBOS USD LIBOR Submitter increased the bank's three-month submission by 1.2%, or 120 basis points, and the next day increased it by 35 basis points.[175] HBOS's three-month submission on September 25, 2008 "was higher than any other panel bank's submission for that tenor."[176] While the official USD LIBOR fixing "was increasing over this period as well," HBOS's USD LIBOR submissions "placed the bank at the top of the panel of submitting banks and made HBOS a clear outlier on the U.S. Dollar LIBOR panel."[177]

[172] *Id.*

[173] *Id.*

[174] *Id.* at 14-15.

[175] *Id.* at 15.

[176] *Id.*

[177] *Id.*

207. The CFTC found that on September 26, 2008, "after discussing the HBOS LIBOR submissions with more senior HBOS managers," the HBOS LIBOR Supervisor "told the U.S. Dollar LIBOR Submitter that the U.S. Dollar LIBOR submissions should be lower relative to the other panel members and directed him to reduce the spread between the HBOS U.S. Dollar LIBOR submissions and the submissions of the other panel members."[178]

208. The same day, "the HBOS U.S. Dollar LIBOR Submitter, in a chat with an employee of another financial institution, stated, 'youll like this ive been pressured by senior management to bring my rates down into line with everyone else.'"[179] Consistent with that directive from the HBOS LIBOR Supervisor, "the HBOS U.S. Dollar LIBOR Submitter substantially reduced his three-month U.S. Dollar LIBOR submissions by 55 basis points on September 26, 2008."[180]

209. The CFTC observed that during the last quarter of 2008, "the HBOS LIBOR submitters also received instructions from the HBOS LIBOR Supervisor, consistent with the message delivered by the HBOS Senior Manager in August 2008, that they normally should not make bids for cash in the market above the rate of the daily LIBOR fixing."[181] Then, on October 30, 2008, "the HBOS LIBOR Supervisor told the submitters in an email (again copying his supervisor) that they should not make LIBOR submissions based on 'the expectation of where funds will come' but should instead 'continue to post levels at or slightly above the level we will pay for deposits or issue [certificates of deposit].'"[182]

210. In other words, "in order to avoid a market perception that HBOS was a desperate borrower of funds, the HBOS LIBOR submitters were instructed to make submissions consistent with the rate at which HBOS bid for funds in the market (*i.e.*, the rate of the LIBOR fixing)

[178] *Id.*

[179] *Id.*

[180] *Id.*

[181] *Id.* at 15, 16.

[182] *Id.* at 16.

rather than at the rate HBOS was offered funds."[183] That instruction "reinforced the HBOS LIBOR Supervisor's directive that HBOS should not be an outlier in its U.S. Dollar . . . LIBOR submissions."[184]

211. For the remainder of 2008 through to HBOS's acquisition by Lloyds TSB in January 2009, "the HBOS LIBOR Supervisor did not withdraw the directives to the HBOS U.S. Dollar and Sterling LIBOR submitters, or instruct them to begin making submissions based on the rate at which HBOS could borrow or were offered funds in the interbank money market."[185] Accordingly, "the HBOS U.S. Dollar and Sterling LIBOR submitters continued to follow these directives," and thus "from late 2008 through the end of the year, HBOS's U.S. Dollar and Sterling LIBOR submissions did not accurately or solely reflect or relate to HBOS's assessment of the costs of borrowing funds in the relevant interbank markets."[186]

212. In sum, the CFTC observed, "[d]uring the last few months of 2008, HBOS lowered its submissions for U.S. Dollar and Sterling LIBOR in order to manage market perceptions and preserve its ability to raise funds from other market participants," and in doing so, made submissions "that did not reflect the rate at which HBOS could borrow in the relevant markets, but instead reflected its desire to avoid being seen as an outlier on the respective LIBOR panels."[187]

213. The CFTC further stated:

> By skewing its U.S. Dollar and Sterling LIBOR submissions, HBOS conveyed false, misleading or knowingly inaccurate reports that its submitted rates for U.S. Dollar and Sterling LIBOR were based on and solely reflected the costs of borrowing unsecured funds in the relevant interbank markets. Accordingly, HBOS knowingly delivered, or caused to be delivered, false, misleading or knowingly inaccurate reports concerning U.S. Dollar and

[183] *Id.*

[184] *Id.* The HBOS LIBOR Supervisor had also issued a similar directive with respect to the bank's Sterling LIBOR submissions. *See id.* at 15-16.

[185] *Id.* at 16.

[186] *Id.*

[187] *Id.*

Sterling LIBOR, which are commodities in interstate commerce.[188]

214. The admissions by Barclays, UBS, RBS, Rabobank, Lloyds, and HBOS definitively reveal that Defendants schemed to conceal their fraudulent and collusive conduct. For example, (i) a UBS trader scolded a manager for internally transmitting in writing a request to manipulate a LIBOR submission;[189] (ii) a Barclays trader consciously sought to move LIBOR submissions in small increments over time to avoid detection;[190] (iii) a UBS derivatives desk manager instructed a LIBOR submitter to lie when interviewed by UBS attorneys investigating LIBOR manipulation;[191] and (iv) in 2010, long after learning of the investigation into LIBOR, RBS traders continued their conduct but sought to avoid communicating in writing because "at the moment the FED are all over us about libors."[192] On information and belief, the other Defendants engaged in similar conduct to cover up their fraudulent and collusive activities involving USD LIBOR. The evidence of such conduct is solely within the custody and control of Defendants or government regulators.

7. <u>The Ongoing LIBOR Government Investigations, which Have Targeted Many (If Not All) of the LIBOR Panel Banks, May Produce Additional Settlements or Charges.</u>

215. Investigations regarding LIBOR manipulation are ongoing in the United States, the United Kingdom, Switzerland, Japan, Canada, the European Union, and Singapore by numerous government agencies, including the DOJ, the CFTC, and the FSA. Those investigations could lead to settlements with, or charges against, other Defendants.

216. On March 16, 2011, the *Financial Times* reported that Bank of America, Citigroup, and others received subpoenas from U.S. regulators "probing the setting of" USD LIBOR "between 2006 and 2008." The *Times* further noted investigators had "demanded information from" WestLB, and that the previous fall, "all 16 members of the committee that

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[188] *Id.*

[189] UBS DOJ Statement ¶ 38.

[190] Barclays DOJ Statement ¶ 34.

[191] UBS DOJ Statement ¶ 39.

[192] RBS FSA Final Notice ¶ 52.

helped the [BBA] set the dollar Libor rate during 2006-08 received informal requests for information."[193]

217. The same day, *MarketWatch* similarly reported "[m]ultiple U.S. and European banks, which provide borrowing costs to calculate Libor every day, have been contacted by investigators," including the DOJ, the SEC, and the CFTC.[194]

218. The next day, Bloomberg reported that, *inter alia*, Citigroup had been subpoenaed by U.S. regulators and that WestLB and Bank of America had been contacted by regulators. The article specified that Bank of America had received subpoenas from the SEC and the DOJ.[195]

219. On March 23, 2011, Bloomberg revealed that Citigroup, Deutsche Bank, Bank of America, and JPMorgan Chase were asked by U.S. regulators "to make employees available to testify as witnesses" in connection with the regulators' ongoing investigation.[196]

220. In an interim report filed on August 1, 2011, HSBC disclosed that it and/or its subsidiaries had "received requests" from various regulators to provide information and were "cooperating with their enquiries."

221. On October 19, 2011, *The Wall Street Journal* reported that the European Commission "seized documents from several major banks" the previous day, "marking the escalation of a worldwide law-enforcement probe" regarding the Euro Interbank Offered Rate, or Euribor—a benchmark, set by more than 40 banks, used to determine interest rates on trillions of euros' worth of euro-denominated loans and debt instruments. The Euribor inquiry, the *Journal* explained, constitutes "an offshoot" of the broader LIBOR investigation that had been ongoing for more than a year. According to the *Journal*, while the list of financial firms raided by the European Commission was not available, people familiar with the situation had counted "a large

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[193] Brooke Masters, Patrick Jenkins & Justin Baer, "Banks served subpoenas in Libor case," FT.com, available at http://www.ft.com/cms/s/0/52958d66-501f-11e0-9ad1-00144feab49a.html#axzz1sJNEDIiI.

[194] Carrick Mollenkamp and David Enrich, "Banks Probed in Libor Manipulation Case," *MarketWatch*, Mar. 16, 2011.

[195] Gavin Finch and Jon Menon, "Barclays, Citigroup Said to Be Subpoenaed in Libor Probe," Bloomberg, Mar. 17, 2011.

[196] Joshua Gallu and Donal Griffin, "Libor Probe Spurs Witness Call-up at Citigroup, Deutsche Bank," Bloomberg, Mar. 23, 2011.

French bank and a large German bank" among the targets, and the coordinated raids "occurred in London and other European cities."

222. On October 31, 2011, the *Financial News* observed that "[a]n investigation into price fixing, first ordered by the [SEC] in 2008, focused on whether banks," including Citigroup and Bank of America, "had been quoting deliberately low rates."[197]

223. On December 9, 2011, *Law360* reported that the Japanese Securities and Exchange Surveillance Commission ("SESC") alleged that Citigroup Global Markets Japan Inc. and UBS Securities Japan Ltd. "employed staffers who attempted to influence" TIBOR "to gain advantage on derivative trades." The SESC recommended that the Japanese prime minister and the head of Japan's Financial Services Agency ("JFSA") take action against the companies. The Commission specified that Citigroup's head of G-10 rates and a Citigroup trader (as well as a UBS trader) were involved in the misconduct, further stating, "[t]he actions of Director A and Trader B are acknowledged to be seriously unjust and malicious, and could undermine the fairness of the markets." Moreover, the Commission added, "[i]n spite of recognizing these actions, the president and CEO . . . who was also responsible for the G-10 rates, overlooked these actions and the company did not take appropriate measures, therefore, the company's internal control system is acknowledged to have a serious problem."[198]

224. Citigroup did not deny the SESC's findings. A Citigroup spokesperson stated, "Citigroup Global Markets Japan takes the matter very seriously and sincerely apologizes to clients and all parties concerned for the issues that led to the recommendation. The company has started working diligently to address the issues raised."

225. Citigroup later disclosed that on December 16, 2011, the JFSA took administrative action against Citigroup Global Markets Japan, Inc. ("CGMJ") for, among other things, certain communications made by two CGMJ traders about Euroyen TIBOR. The JFSA issued a business improvement order and suspended CGMJ's trading in derivatives related to

[197] Tom Osborn, "Is Libor in its death throes?", *Financial News*, Oct. 31, 2011.

[198] Juan Carlos Rodriguez, "Japan Accuses Citi, UBS Of Market Trickery," *Law360*, Dec. 9, 2011.

Yen LIBOR, as well as Euroyen and Yen-TIBOR from January 10 to January 23, 2012. On the same day, the JFSA also took administrative action against Citibank Japan Ltd. for conduct arising out of Citibank Japan's retail business and also noted that the communications made by the CGMJ traders to employees of Citibank Japan about Euroyen TIBOR had not been properly reported to Citibank Japan's management team.

226. Other news accounts have confirmed, based at least in part on information from people familiar with the ongoing investigations, that investigators are examining potential improper collusion by traders and bankers to manipulate LIBOR or other rates. On February 3, 2012, for instance, Credit Suisse disclosed that the Swiss Competition Commission commenced an investigation involving twelve banks and certain other financial intermediaries, including Credit Suisse, concerning alleged collusive behavior among traders to affect the bid ask spread for derivatives tied to the LIBOR and TIBOR reference rates fixed with respect to certain currencies, and collusive agreements to influence these rates.

227. Additionally, on February 14, 2012, Bloomberg reported that two people with knowledge of the ongoing LIBOR probe said global regulators "have exposed flaws in banks' internal controls that may have allowed traders to manipulate interest rates around the world." The same people, who were not identified by name (as they were not authorized to speak publicly about those matters), stated investigators also had "received e-mail evidence of potential collusion" between firms setting LIBOR. Those sources further noted Britain's FSA was "probing whether banks' proprietary-trading desks exploited information they had about the direction of Libor to trade interest-rate derivatives, potentially defrauding their firms' counterparties."[199]

228. Bloomberg further reported that Citigroup and Deutsche Bank "have dismissed, put on leave or suspended traders as part of the investigations."

[199] Lindsay Fortado and Joshua Gallu, "Libor Probe Said to Expose Collusion, Lack of Internal Controls," Bloomberg, Feb. 14, 2012.

229. Bloomberg also reported that European Union antitrust regulators are also investigating whether banks effectively formed a global cartel and coordinated how to report borrowing costs between 2006 and 2008.

230. Legal proceedings in Canada and Singapore in 2011 strongly indicated that some Defendants manipulated Yen LIBOR, the Yen-based rate set by a 15-member BBA panel that, during the Relevant Period, consisted of (and still consists of) many of the same banks whose borrowing-cost quotes determine USD LIBOR, including Barclays, Citibank, Deutsche Bank, HSBC, JPMorgan Chase, Lloyds, RBS, and UBS. The facts demonstrating Defendants' misconduct with respect to Yen LIBOR illustrate both their desire and ability to manipulate interest rates, and the method by which they have done so.

V. DEFENDANTS ACTIVELY CONCEALED THEIR MISCONDUCT, INCLUDING FALSELY DISMISSING QUESTIONS ABOUT LIBOR'S INTEGRITY

231. The first public revelation regarding government investigations into possible LIBOR manipulation occurred on March 15, 2011, when UBS disclosed in a Form 20-F (annual report) filed with the SEC that the bank had "received subpoenas" from the SEC, the CFTC, and the DOJ "in connection with investigations regarding submissions to the [BBA]." UBS stated it understood "that the investigations focus on whether there were improper attempts by UBS, either acting on its own or together with others, to manipulate LIBOR rates at certain times." The bank further disclosed that it had "received an order to provide information to the Japan Financial Supervisory Agency concerning similar matters." UBS stated it was "conducting an internal review" and was "cooperating with the investigations."

232. Before that disclosure, the Schwab Plaintiffs had not discovered, and could not with reasonable diligence have discovered, facts indicating Defendants were knowingly engaging in misconduct that caused LIBOR to be artificially depressed during the Relevant Period. Indeed, only approximately six months after UBS's revelations, Plaintiffs filed the Initial Schwab Actions. Though some market participants and commentators voiced concerns in late 2007-early 2008 that LIBOR did not reflect banks' true borrowing costs, those concerns were quickly—though, it now turns out, wrongly—dismissed by the BBA and Defendants themselves.

233. Accordingly, the statutes of limitations applicable to the Schwab Plaintiffs' claims are subject to the discovery rule, equitable tolling, and tolling based on Defendants' fraudulent concealment of their misconduct. Further, Defendants are equitably estopped from asserting that any of Plaintiffs' claims is untimely.

A. Defendants' Unlawful Activities Were Inherently Self-Concealing.

234. Defendants conspired to share information regarding their LIBOR quotes and to misrepresent their borrowing costs to the BBA. In so doing, Defendants aimed to, and did, depress LIBOR to artificially low levels, which allowed them to pay unduly low interest rates on LIBOR-based financial instruments they or others issued or sold to investors, including the Schwab Plaintiffs.

235. Defendants' misconduct was, by its very nature, self-concealing. First, those banks' actual or reasonably expected costs of borrowing were not publicly disclosed, rendering it impossible for investors, including Plaintiffs, to discern (without sophisticated expert analysis) any discrepancies between Defendants' publicly disclosed LIBOR quotes and other measures of those banks' actual or reasonably expected borrowing costs. Second, communications within and among the banks likewise were not publicly available, which further precluded investors, including Plaintiffs, from discovering Defendants' misconduct, even with reasonable diligence.

236. As a result of the self-concealing nature of Defendants' collusive scheme, no person of ordinary intelligence would have discovered, or with reasonable diligence could have discovered, facts indicating Defendants were unlawfully suppressing LIBOR during the Relevant Period. Indeed, particularly given the extraordinary disruption affecting the financial markets during much of the Relevant Period, no reasonable investor would have had reason to suspect that any observable discrepancies between LIBOR and other measures of Defendants' costs of borrowing were due to misconduct—particularly ***knowing*** misconduct—rather than market dislocation.

B. The BBA and Defendants Deflected Concerns Raised by Some Market Observers and Participants In Late 2007 and Early 2008 About LIBOR's Accuracy.

237. In November 2007, a concern arose among some in the U.K. banking community that the members of the USD LIBOR panel might be understating their true costs of borrowing, thus causing LIBOR to be set artificially low. Some U.K. banks raised their concerns at a meeting of the Bank of England that month.

238. In response to those concerns, specifically "anecdotal evidence gathered from conversation with market participants . . . that the rates quoted and paid by banks on their interbank borrowing tended to vary more than usual (and by more than what appears in the LIBOR panel) during the turbulence," the Bank for International Settlements ("BIS") in Spring 2008 produced a study of USD LIBOR. The BIS examined the difference, or "spread," between USD LIBOR and OISs, which are viewed as virtually risk-free; thus the positive difference between LIBOR and interest rates on those swaps should reflect the credit risk of the quoting banks. The BIS then compared the LIBOR-OIS spread to the cost of CDS insurance on the BBA panel banks' debt. Absent manipulation, those two values should exhibit a stable relationship, because they both depend on the same thing: the credit risk of the quoting banks.

239. Contrary to that expectation, the BIS found an unusually "loose" relationship between CDS premiums and the LIBOR-OIS spread, beginning in August 2007 and continuing at least into 2008, when the BIS published its findings. During that time, CDS premiums led the LIBOR-OIS spread in an upward trend. In other words, the cost of CDS insurance on the panel banks' debt increased more swiftly than did the difference between LIBOR and interest rates on OIS, when the two values should have behaved similarly.

240. In May 2008, after *The Wall Street Journal* reported its LIBOR analysis (detailed above), strategist Tim Bond of Barclays admitted "the rates the banks were posting to the BBA became a little divorced from reality" during 2007-2008, adding:

> We had one week in September where our treasurer, who takes his responsibilities pretty seriously, said, "Right, I've had enough of this, I'm going to quote the right rates". All we got for our pains was a series of media articles saying that we were having difficulty

financing.[200]

241. Additionally, in a report published mid-April 2008 entitled "Is LIBOR Broken?", Citigroup's Scott Peng wrote "Libor at times no longer represents the level at which banks extend loans to others." He concluded that LIBOR was suppressed by 30 basis points. Peng resigned approximately one year later. Reports of his resignation referenced his disclosures about LIBOR. On April 18, 2008, Credit Suisse's William Porter, a credit strategist, estimated an even greater suppression: 40 bps (as reported that day by *The Wall Street Journal*).

242. On April 3, 2008, the Bank of England money-market committee held a meeting of U.K. banks. The minutes of that meeting state: "U.S. Dollar Libor rates had at times appeared lower than actual traded interbank rates."

243. As a result of the concerns and statements recounted above, the BBA conducted an inquiry regarding LIBOR. Notably, shortly after the BBA announced its investigation, the LIBOR panel banks raised their quotes, causing LIBOR to log its biggest increase since August 2007. Defendants thus falsely and misleadingly signaled that any improper reporting of false rates that may have previously occurred had ended.

244. Additionally, the BBA ultimately determined—wrongly, it later turned out—that LIBOR had not been manipulated, thus providing further (incorrect) assurance to investors that the concerns expressed by some market participants were unfounded.

245. After *The Wall Street Journal*'s April 16, 2008 article questioning LIBOR's accuracy, for instance, the BBA engaged in what its executives characterized as a "charm offensive,"[201] contacting investors and journalists to dispel concerns regarding LIBOR.

246. At that time, the BBA publicly announced it would expel any panel bank that deliberately submitted inaccurate LIBOR quotes.[202] The BBA also stated that it would conduct

[200] http://www.telegraph.co.uk/finance/newsbysector/banksandfinance/2790833/Libor-credibility-questioned-by-Barclays-strategist.html.

[201] David Enrich & Max Colchester, "Before Scandal, Clash over Control of Libor," *The Wall Street Journal*, Sept. 11, 2012, available at http://online.wsj.com/article.SB10000872396390443847404577631404235329424.html.

[202] UBS DOJ Statement ¶ 114.

an expedited "intensive review" of its LIBOR process but that it did not believe panel banks had submitted false quotes.[203]

247. Moreover, Defendants engaged in a media strategy that diffused the speculation that had arisen concerning LIBOR—thereby further concealing their conduct. On April 21, 2008, for instance, Dominic Konstam of Credit Suisse affirmatively stated the low LIBOR rates were attributable to the fact that U.S. banks, such as Citibank and JPMorgan, had access to large customer deposits and borrowing from the Federal Reserve and did not need more expensive loans from other banks: "Banks are hoarding cash because funding from the asset-backed commercial paper market has fallen sharply while money market funds are lending on a short term basis and are restricting their supply."[204]

248. Also that day, Jeffrey Rosenberg, head of credit strategy at Banc of America Securities, asserted that the variations in LIBOR resulted from the way the BBA calculates LIBOR. Specifically, he stated the BBA's approach "works when both overall bank risk is low and the dispersion of risks across banks is small . . . [which] is clearly not the case currently."[205] The same article in which Rosenberg's statements were recounted also quoted unidentified "bankers" as stating it was "unlikely that this discrepancy has arisen because banks have deliberately been colluding to keep LIBOR rates down."[206]

249. In an April 28, 2008 interview with the *Financial Times*, Credit Suisse's Konstam continued to defend LIBOR's reliability:

> Libor has been a barometer of the need for banks to raise capital. The main problem with Libor is the capital strains facing banks … Initially there was some confusion that Libor itself was the problem, with talk of the rate being manipulated and not representative of the true cost of borrowing.[207]

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[203] Carrick Mollenkamp & Laurence Norman, "British Bankers Group Sets Up Review of Widely Used Libor," *The Wall Street Journal*, Apr. 17, 2008, available at http://online.wsj.com/article/SB120838284713820833.html.

[204] Gillian Tett & Michael Mackenzie, "Doubts Over Libor Widen," FT.com, available at http://www.ft.com/cms/s/0/d1d9a792-0fbd-11dd-8871-0000779fd2ac.html#axzz1szdS58jE.

[205] *Id.*

[206] *Id.*

[207] Michael Mackenzie, "Talk of quick fix recedes as Libor gap fails to close," FT.com, available at

250. On May 16, 2008, in response to a media inquiry, JPMorgan commented "[t]he Libor interbank rate-setting process is not broken, and recent rate volatility can be blamed largely on reluctance among banks to lend to each other amid the current credit crunch."[208]

251. The same day, Colin Withers of Citigroup assured the public that LIBOR remained reliable, emphasizing "the measures we are using are historic -- up to 30 to 40 years old."[209]

252. And in May 2008, *The Wall Street Journal* asked numerous Defendants to comment on the media speculation concerning aberrations in LIBOR. Rather than declining or refusing to comment, those Defendants made affirmative representations designed to further conceal their wrongdoing. On May 29, 2008, for instance, Citibank affirmatively claimed innocence and stated it continued to "submit [its] Libor rates at levels that accurately reflect [its] perception of the market." HBOS—which, as detailed above, has since acknowledged making false or misleading LIBOR submissions to the BBA—similarly asserted that its LIBOR quotes constituted a "genuine and realistic" indication of the bank's borrowing costs.[210]

253. More recent analyses and investigations by government entities further demonstrate there was insufficient information about ***wrongdoing*** to put investors, including Plaintiffs, on inquiry notice of their claims. For example, a recently released internal report prepared by the New York Fed in May 2008 observed, "***Beyond the anecdotal evidence and LIBOR re-sets, it is difficult to find convincing evidence of actual misreporting.*** Few public sources of data on actual Eurodollar transaction rates exist, and again, the extent of credit tiering makes it difficult to extrapolate from what data there is . . . ." (Emphasis added).

254. Similarly, the FSA—which, as noted above, has been engaged in an intensive and lengthy investigation of LIBOR manipulation—recently observed that the evidence of

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http://www.ft.com/intl/cms/s/0/3da27a46-5d05-11dd-8d38-000077b07658.html#axzz1szdS58jE.

[208] Kirsten Donovan, Jamie McGeever, Jennifer Ablan, Richard Leong & John Parry, "European, U.S. bankers work on Libor problems," reuters.com, available at http://in.reuters.com/article/2008/05/16/markets-rates-bba-idINL162110020080516.

[209] *Id.*

[210] Carrick Mollenkamp & Mark Whitehouse, "Study Casts Doubt on Key Rate."

"dislocation" with respect to LIBOR "did not in itself . . . carry any implication that 'lowballing' was occurring."[211] Indeed, former FSA chief Adair Turner told Parliament on February 26, 2013, that there was "no information" LIBOR manipulation and that regulators could not have spotted the fraudulent and collusive conduct even with "intensive supervision."[212] Former CFTC Chairman Gary Gensler similarly has said it took his agency, using the powers at its disposal, years to uncover the fraud and collusion. He was quoted as saying, "It took 20 months before we had actionable evidence. For two and a half years, I was constantly challenging the staff: 'How do we bring this case? How do we get it into the public arena?"[213]

255. Indeed, even the April 16, 2008 *Journal* article that questioned LIBOR's accuracy cautioned "no specific evidence has emerged that banks have provided false information about borrowing costs."[214]

C. <u>Expert Analysis Performed in Connection with the LIBOR MDL Proceedings Indicates LIBOR's Increase Following Expressions of Concern Over LIBOR's Viability Resulted from Defendants' Attempt to Conceal Their Misconduct.</u>

256. On April 17, 2008, the day after *The Wall Street Journal* initially reported on LIBOR's anomalous behavior and the BBA stated it would conduct an inquiry concerning LIBOR, there was a sudden jump in USD LIBOR; the three-month borrowing rate hit 2.8175% that day, about eight basis points more than the previous day's rate of 2.735%.

257. Suspiciously, reported LIBOR rates for other currencies fell or remained relatively flat at the time USD LIBOR rose, a sign that the latter was susceptible to manipulation.

258. A consulting expert engaged by the Schwab Plaintiffs and other plaintiffs in the LIBOR MDL Proceedings conducted an analysis of the change in LIBOR on April 17, 2008. The analysis tested the hypothesis that if banks did not manipulate LIBOR, there would be no

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[211] FSA Internal Audit Report, "A Review of the Extent of Awareness within the FSA of Inappropriate Libor Submissions, Management Response," ¶ 1.5 (Mar. 2013), available at www.fsa.gov.uk/static/pubs/other/ia-libor-management-response.pdf.

[212] Huw Jones, "It Was Impossible To Spot Libor Rigging: UK Watchdog," *Reuters*, Feb. 27, 2013, available at http://www.reuters.com/article/2013/02/27/us-libor-britain-fsa-idUSBRE91Q0NX20130227.

[213] Joe Nocera, "The Little Agency That Could," *The New York Times*, Nov. 15, 2013, available at http://www.nytimes.com/2013/11/16/opinion/the-little-agency-that-could.html?_r=0.

[214] Mollenkamp, "Bankers Case Doubt on Key Rate Amid Crisis."

systematic changes in LIBOR expected on April 17, 2008, whereas if banks did manipulate LIBOR—and were responding to *The Wall Street Journal* article and the BBA's announcement following it—the reporting banks would be likely to reduce or abandon the manipulation immediately in response to those events. An immediate reduction in LIBOR manipulation would result in an increase in LIBOR quotes by the member banks on April 17, 2008.

259. To conduct the analysis, the consulting expert ran a regression using the daily changes in LIBOR. Table 1 below shows the study results. As discussed above, LIBOR increased on April 17, 2008 at a statistically significant level. Moreover, 10 of the 16 bank quote increases were statistically significant. These findings were consistent with the hypothesis that the banks manipulated and suppressed LIBOR.

Table 1

Changes in LIBOR on April 17, 2008*

	Dependent variable	**Average change in LIBOR during the period 1/5/2000 – 5/13/2011**	**April 17, 2008 Reported Increase**	**Statistical Significance at the 1-5% level of the April 17, 2008 move**
1	BBA LIBOR	-0.00203	0.08578	5%
2	HSBC LIBOR	-0.00167	0.12167	1%
3	JPMC LIBOR	-0.00203	0.08203	5%
4	BARCLAYS LIBOR	-0.00202	0.10202	5%
5	WEST LB LIBOR	-0.00199	0.09199	5%
6	RBS LIBOR	-0.00201	0.08701	5%
7	RABOBANK LIBOR	-0.00206	0.08206	5%
8	CITI LIBOR	-0.00203	0.09703	5%
9	UBS LIBOR	-0.00245	0.09745	5%
10	NORIN LIBOR	-0.00204	0.09204	5%
	*Statistical significance is assessed using a AR(3) model for the residuals.			

260. An alternative hypothesis is that, in addition to reacting to the *Journal*, other confounding effects that are related to the risk of the banks could have emerged on April 16, 2008 and April 17, 2008. This alternative hypothesis also predicts an increase in LIBOR. To

test this alternative hypothesis, instead of looking at daily changes in LIBOR quotes, it is possible to see daily changes in the difference between banks' LIBOR quotes and the Federal Reserve Eurodollar Deposit Rate (the "Spread"). If risk related factors played a role, they would affect both the banks' LIBOR quotes as well as the Federal Reserve's Eurodollar Deposit Rate. Thus, if this hypothesis is correct, one should not see any changes to the Spread on April 17, 2008, since these two effects should cancel out. However, if there were no risk related news and only a reaction to the *Journal* article and the BBA announcement played a major role, then only LIBOR would be affected, leaving the Federal Reserve's Eurodollar Deposit Rate mostly unaffected. In this case, the Spread would again be expected to increase.

261. The test of this alternative hypothesis showed that the Spreads of all 16 panel banks increased on April 17, 2008, and, as shown in Table 2 below, 11 of the 16 changes were statistically significant at levels ranging from 1% to 5%. Once again, these finding were consistent with the manipulation hypothesis and inconsistent with the hypothesis that other risk factors explained the April 17, 2008 shock to the LIBOR rate.

Table 2

Changes in Spread on April 17, 2008*

	Dependent variable	**Average change in LIBOR during the period 1/5/2000 – 5/13/2011**	**April 17, 2008 Reported Increase**	**Statistical Significance at the 1-5% level of the April 17, 2008 move**
1	BBA LIBOR Spread	-0.00007507	0.08383	5%
2	HSBC LIBOR Spread	0.00024665	0.11975	1%
3	JPMC LIBOR Spread	-0.00016117	0.08016	5%
4	BARCLAYS LIBOR Spread	-0.00010337	0.1001	1%
5	RBS LIBOR Spread	-0.00010924	0.08511	5%
6	TOKYO LIBOR Spread	0.00001534	0.07998	5%
7	CITI LIBOR Spread	-0.00016073	0.09516	5%
8	CS LIBOR Spread	-0.0001738	0.07017	5%
9	RBC LIBOR Spread	-0.00010722	0.09511	5%
10	UBS LIBOR Spread	-0.00011816	0.09512	5%

11	NORIN LIBOR Spread	-0.00020698	0.09021	1%
	* Statistical significance is assessed using a AR(3) model for the residuals.			

D. Investors, Including the Schwab Plaintiffs, Certainly Could Not Have Known or Reasonably Discovered—Until at Least March 2011—Facts Suggesting that Defendants *Knowingly Acted* to Suppress LIBOR.

262. Notwithstanding the smattering of statements in late 2007-early 2008 questioning LIBOR's viability, Plaintiffs had no reason to suspect, at least until the existence of government investigations was revealed in March 2011, that Defendants were ***knowingly acting*** to suppress LIBOR. Indeed, as a result of Defendants' secret conspiracy and their purposeful concealment of relevant information, no facts arose before March 2011 to put Plaintiffs on inquiry notice that a conspiracy to manipulate LIBOR existed.

VI. APPLICABILITY OF THE DISCOVERY RULE AND TOLLING OF STATUTES OF LIMITATIONS

263. Plaintiffs' claims are subject to equitable tolling due to the fraudulent and surreptitious nature of Defendants' misconduct, which Defendants intended to, and did, conceal from Plaintiffs and other investors throughout the Relevant Period. Accordingly, the "discovery rule" applies to Plaintiffs' claims, as Plaintiffs did not discover, nor had reason to discover, the causes of action set forth in this Complaint, until well after the Relevant Period.

264. Furthermore, Defendants' misconduct constituted a "continuous violation" as defined under the law, such that the limitations periods for Plaintiffs' claims did not accrue until the date of the last wrong or injury that is the subject of this action.

265. The doctrine set forth in *American Pipe & Construction Co. v. Utah*, 414 U.S. 538 (1974), and its progeny, also applies to the statutes of limitations for the Schwab Plaintiffs' claims, by virtue of Plaintiffs' status as absent class members in putative class actions included in the LIBOR MDL Proceedings. Accordingly, the statutes of limitations applicable to the Schwab Plaintiffs' claims were suspended as of the date the first LIBOR-related putative class action encompassing the Schwab Plaintiffs was filed. The Schwab Plaintiffs' claims arise from the same evidence, memories, and witnesses as the claims asserted in the putative class cases pending in the LIBOR MDL Proceedings, and thus Defendants have had notice of the Schwab

Plaintiffs' claims at all times since the first putative class action encompassing the Schwab Plaintiffs was filed. The Schwab Plaintiffs' claims are also subject to tolling under California's equitable-tolling doctrine, as the Schwab Plaintiffs have acted in good faith in asserting their claims separately from the putative class actions included in the LIBOR MDL Proceedings and Defendants are not prejudiced by having to defend against this separate action.

266. The statutes of limitations and repose applicable to the Schwab Plaintiffs' claims under the Exchange Act and the Securities Act were also tolled by the filing of those claims in the Initial Schwab Actions.

267. Additionally, as this Court, in its Dismissal Order, declined to exercise supplemental jurisdiction in accordance with 28 U.S.C. § 1367 over the Schwab Plaintiffs' claims for interference with prospective economic advantage, breach of the implied covenant of good faith and fair dealing, and unjust enrichment, the statutes of limitations for those claims were tolled while they were pending in the LIBOR MDL Proceedings and continued to be tolled for at least 30 days after this Court dismissed them without prejudice. *See* 28 U.S.C. § 1367(d).

VII. THE SCHWAB PLAINTIFFS SUFFERED SIGNIFICANT HARM AS A RESULT OF DEFENDANTS' MISCONDUCT

A. Plaintiffs Collectively Purchased Hundreds of Billions of Dollars in LIBOR-Based Financial Instruments that Paid Unduly Low Rates of Return.

268. Throughout the Relevant Period, Defendants' manipulation of LIBOR caused damage to the Schwab Plaintiffs by artificially depressing the value of billions of dollars in LIBOR-based financial instruments they purchased or held. Most of those instruments fall into one of the following categories.

269. Floating-rate instruments. Throughout the Relevant Period, the Schwab Plaintiffs bought and usually held to maturity floating-rate instruments indexed to LIBOR. These obligations paid a rate of return based on USD LIBOR; specifically, they paid USD LIBOR plus an additional fixed rate of return. These floating-rate instruments included, among others, commercial paper and certificates of deposit. "Commercial paper" refers to an unsecured promissory obligation with a fixed maturity typically of up to nine months. Such obligations are

issued and sold by large corporations and banks in order to raise short-term funds. "Certificates of deposit" are time deposits with a financial institution such as a credit union or bank. Defendants' suppression of LIBOR caused Plaintiffs to receive lower returns on these obligations than they would have if LIBOR had been properly set, which was a foreseeable result of Defendants' misconduct. Plaintiffs relied on the accuracy of LIBOR in undertaking these transactions.

270. Fixed-rate instruments. Throughout the Relevant Period, the Schwab Plaintiffs bought, and usually held to maturity, fixed-rate instruments such as commercial paper and certificates of deposit, which paid a fixed rate of return. When considering whether to purchase a fixed-rate instrument, Plaintiffs evaluated the difference (or "spread") between the offered rate and LIBOR. A large positive spread to LIBOR might make the offering "rich," depending on the credit risk of the issuer. A lower positive spread or a negative spread might make the offering less attractive, again depending on the quality of the issuer. This is a common analysis undertaken by participants in these markets. Thus, suppressing LIBOR would always, and obviously, tend to suppress the rates of return on fixed-rate instruments by making lower rates of return relatively more attractive. Defendants' suppression of LIBOR caused Plaintiffs to receive lower returns on these obligations than they would have if LIBOR had been properly set. Plaintiffs relied on the accuracy of LIBOR in undertaking these transactions, which was a foreseeable result of Defendants' misconduct.

271. Plaintiffs engaged in the following categories of floating-rate and fixed-rate transactions with respect to which they suffered harm. With respect to each category, Defendants' manipulation caused Plaintiffs to receive less money than they otherwise would have.

272. ***Category 1*: LIBOR-based financial instruments issued by Defendants.** During the Relevant Period, Plaintiffs purchased more than $40 billion in LIBOR-based financial instruments issued by Defendants Deutsche Bank, Royal Bank of Canada, RBS, Rabobank,

UBS, Barclays, Bank of America, Credit Suisse, JPMorgan Chase, Norinchukin Bank, Citibank, and HSBC.

273. ***Category 2*: LIBOR-based financial instruments sold by Defendants.** During the Relevant Period, Plaintiffs purchased more than $175 billion in LIBOR-based financial instruments from Defendants HSBC, Citibank, Deutsche Bank, JPMorgan Chase, and UBS. Some of those instruments were also issued by Defendants.

274. ***Category 3*: LIBOR-based financial instruments sold by broker-dealer subsidiaries or affiliates of Defendants.** During the Relevant Period, Plaintiffs purchased more than $175 billion in LIBOR-based financial instruments from broker-dealer subsidiaries or affiliates of Defendants Bank of America, Barclays, Citibank, Credit Suisse, Deutsche Bank, JPMorgan Chase, Royal Bank of Canada, RBS, and UBS. Some of those instruments were also issued by Defendants. Those broker-dealers included, *inter alia*: (i) Deutsche Bank Securities; (ii) Banc of America Securities, LLC; (iii) Barclays Capital Inc.; (iv) Credit Suisse First Boston LLC (n/k/a Credit Suisse Securities (USA) LLC); (v) UBS Financial Services Inc.; (vi) UBS Securities LLC; (vii) Citigroup Global Markets Inc.; (viii) Citigroup Funding, Inc.; (ix) RBS Securities, Inc. (f/k/a Greenwich Capital Markets, Inc.); (x) Bank of Scotland plc; (xi) J.P. Morgan Securities Inc. (f/k/a Bear Stearns & Co.); (xii) JP Morgan Securities LLC; (xiii) J.P. Morgan Clearing Corp.; (xiv) HSBC Bank USA, N.A.; (xv) HSBC Finance Corporation; (xvi) HSBC Securities (USA) Inc.; and (xvii) RBC Capital Markets.

275. Those broker-dealers sold LIBOR-based financial instruments that contained misstatements or omissions of material fact with respect to the accuracy or integrity of LIBOR, which Defendants made or caused to be made. Further, Defendants, which controlled or otherwise directed or materially participated in the operations of those broker-dealers, reaped proceeds or other financial benefits from the broker-dealers' sales of LIBOR-based financial instruments, including but not limited to instances where Defendants issued the LIBOR-based financial instruments that were then sold by their broker-dealer subsidiaries or affiliates.

276. ***Category 4*: LIBOR-based financial instruments issued or sold by third parties.** During the Relevant Period, Plaintiffs purchased from third-parties (i.e., entities that are not named as Defendants and are not subsidiaries or affiliates of Defendants) more than $275 billion in LIBOR-based financial instruments. Some of those instruments were issued by Defendants.

B. Plaintiffs' Respective Transactions in LIBOR-Based Financial Instruments

1. The Charles Schwab Corporation

277. During the Relevant Period, Plaintiff The Charles Schwab Corporation purchased an aggregate of $466 million of floating-rate instruments, including discounted short-term corporate and bank and financial institutions notes, that were affected by Defendants' suppression of LIBOR.

2. Charles Schwab Bank, N.A.

278. During the Relevant Period, Plaintiff The Charles Schwab Bank, N.A. purchased an aggregate of $942 million of floating-rate instruments, including corporate debt and time deposit certificates, that were affected by Defendants' suppression of LIBOR. Of those, Plaintiff purchased more than $128 million of instruments from Defendant JPMorgan Chase and purchased more than $509 million of instruments from dealer entities that were subsidiaries or other affiliates of Defendants.

279. During the Relevant Period, Plaintiff The Charles Schwab Bank, N.A. purchased an aggregate of $1 billion of fixed-rate instruments with a remaining maturity of between five and 365 days at the time of purchase, including bank time deposit certificates and mortgage instruments, that were affected by Defendants' suppression of LIBOR. Of those, Plaintiff purchased more than $99 million of instruments from Defendant JPMorgan Chase and purchased more than $225 million of instruments from dealer entities that were subsidiaries or other affiliates of Defendants.

3. **Charles Schwab & Co., Inc.**

280. During the Relevant Period, Plaintiff Charles Schwab & Co., Inc. purchased an aggregate of $35 million of floating-rate instruments, including corporate debt and time deposit certificates, that were affected by Defendants' suppression of LIBOR.

281. During the Relevant Period, Plaintiff Charles Schwab & Co., Inc. purchased an aggregate of $28.4 billion of fixed-rate instruments with a remaining maturity of between five and 365 days at the time of purchase, including bank time deposit certificates, that were affected by Defendants' suppression of LIBOR. Of those, Plaintiff purchased more than $5.3 billion of instruments from Defendant JPMorgan Chase and purchased more than $4 billion of instruments from dealer entities that were subsidiaries or other affiliates of Defendants.

4. **Schwab Short-Term Bond Market Fund**

282. As of July 1, 2007, Plaintiff Schwab Short-Term Bond Market Fund held an aggregate of $46 million of floating-rate instruments, including corporate debt and financial institutions funding notes, affected by Defendants' suppression of LIBOR.

283. During the Relevant Period, Plaintiff Schwab Short-Term Bond Market Fund purchased an aggregate of $167 million of fixed-rate instruments with a remaining maturity of between five and 365 days at the time of purchase, including corporate debt and financial institutions funding debt, that were affected by Defendants' suppression of LIBOR. Of those, Plaintiff purchased more than $57 million of instruments from Defendant JPMorgan Chase and purchased more than $43 million of instruments from dealer entities that were subsidiaries or other affiliates of Defendants.

5. **Schwab Total Bond Market Fund**

284. As of July 1, 2007, Plaintiff Schwab Total Bond Market Fund held an aggregate of $110 million of floating-rate instruments, including corporate debt and financial institutions funding notes, affected by Defendants' suppression of LIBOR.

285. During the Relevant Period, Plaintiff Schwab Total Bond Market Fund purchased an aggregate of $3.5 billion of fixed-rate instruments with a remaining maturity of between five and 365 days at the time of purchase, including corporate debt, bank funding notes financial

institutions funding debt, mortgage discount notes, mortgage loans, and other mortgage-related instruments, that were affected by Defendants' suppression of LIBOR. Of those, Plaintiff purchased more than $433 million of instruments from Defendant JPMorgan Chase and purchased more than $1.8 billion of instruments from dealer entities that were subsidiaries or other affiliates of Defendants.

6. Schwab U.S. Dollar Liquid Assets Fund

286. During the Relevant Period, Plaintiff Schwab U.S. Dollar Liquid Assets Fund purchased an aggregate of $95 million of floating-rate instruments, including bank and financial institutions certificates of deposit, that were affected by Defendants' suppression of LIBOR.

287. During the Relevant Period, Plaintiff Schwab Retirement Advantage Money Fund purchased an aggregate of $5.4 billion of fixed-rate instruments with a remaining maturity of between five and 365 days at the time of purchase, including bank certificates of deposit, commercial paper and mortgage discount notes, that were affected by Defendants' suppression of LIBOR.

7. Schwab Money Market Fund

288. During the Relevant Period, Plaintiff Schwab Money Market Fund purchased an aggregate of $1.4 billion of floating-rate instruments, including bank notes and debt, financial institutions funding notes, mortgage discount notes, mortgage loans, and other mortgage-related instruments, that were affected by Defendants' suppression of LIBOR. Of those, Plaintiff purchased $327 million of instruments from Defendant JPMorgan Chase and purchased $779 million of instruments from dealer entities that were subsidiaries or other affiliates of Defendants.

289. During the Relevant Period, Plaintiff Schwab Money Market Fund purchased an aggregate of $83.5 billion of fixed-rate instruments with a remaining maturity of between five and 365 days at the time of purchase, including bank and financial institutions funding notes and debt, mortgage discount notes, mortgage loans, and other mortgage-related instruments, that were affected by Defendants' suppression of LIBOR. Of those, Plaintiff purchased more than

$20 billion of instruments from Defendants Citibank, Deutsche Bank, and JPMorgan Chase, collectively, and purchased more than $28 billion of instruments from dealer entities that were subsidiaries or other affiliates of Defendants.

8. Schwab Value Advantage Money Fund

290. During the Relevant Period, Plaintiff Schwab Value Advantage Money Fund purchased an aggregate of $4.56 billion of floating-rate instruments, including bank notes and debt, financial institutions funding notes, mortgage discount notes, mortgage loans, and other mortgage-related instruments, that were affected by Defendants' suppression of LIBOR. Of those, Plaintiff purchased $601 million of instruments from Defendant JPMorgan Chase and purchased more than $1.9 billion of instruments from dealer entities that were subsidiaries or other affiliates of Defendants.

291. During the Relevant Period, Plaintiff Schwab Value Advantage Money Fund purchased an aggregate of $288 billion of fixed-rate instruments with a remaining maturity of between five and 365 days at the time of purchase, including bank and financial institutions funding notes and debt, mortgage discount notes, mortgage loans, and other mortgage-related instruments, that were affected by Defendants' suppression of LIBOR. Of those, Plaintiff purchased more than $73 billion of instruments from Defendants Citibank, Deutsche Bank, and JPMorgan Chase, collectively, and purchased more than $91 billion of instruments from dealer entities that were subsidiaries or other affiliates of Defendants.

9. Schwab Retirement Advantage Money Fund

292. During the Relevant Period, Plaintiff Schwab Retirement Advantage Money Fund purchased an aggregate of $55 million of floating-rate instruments, including bank notes and debt, corporate debt, financial institutions funding notes, mortgage discount notes, mortgage loans, and other mortgage-related instruments, that were affected by Defendants' suppression of LIBOR. Of those, Plaintiff purchased $19 million of instruments from Defendant JPMorgan Chase and purchased $34 million of instruments from dealer entities that were subsidiaries or other affiliates of Defendants.

293. During the Relevant Period, Plaintiff Schwab Retirement Advantage Money Fund purchased an aggregate of $4.7 billion of fixed-rate instruments with a remaining maturity of between five and 365 days at the time of purchase, including bank and financial institutions funding notes and debt, mortgage discount notes, mortgage loans, and other mortgage-related instruments, that were affected by Defendants' suppression of LIBOR. Of those, Plaintiff purchased more than $1 billion of instruments from Defendants Citibank, Deutsche Bank, and JPMorgan Chase, collectively, and more than $1.5 billion of instruments from dealer entities that were subsidiaries or other affiliates of Defendants.

10. Schwab Investor Money Fund

294. During the Relevant Period, Plaintiff Schwab Investor Money Fund purchased an aggregate of $195 million of floating-rate instruments, including bank notes and debt, corporate debt, financial institutions funding notes, mortgage discount notes, mortgage loans, and other mortgage-related instruments, that were affected by Defendants' suppression of LIBOR. Of those, Plaintiff purchased $42 million of instruments from Defendant JPMorgan Chase and purchased $94 million of instruments from dealer entities that were subsidiaries or other affiliates of Defendants.

295. During the Relevant Period, Plaintiff Schwab Investor Money Fund purchased an aggregate of $12 billion of fixed-rate instruments with a remaining maturity of between five and 365 days at the time of purchase, including bank and financial institutions funding notes and debt, mortgage discount notes, mortgage loans, and other mortgage-related instruments, that were affected by Defendants' suppression of LIBOR. Of those, Plaintiff purchased more than $3 billion of instruments from Defendants Citibank, Deutsche Bank, and JPMorgan Chase, collectively, and purchased more than $4 billion of instruments from dealer entities that were subsidiaries or other affiliates of Defendants.

11. Schwab Cash Reserves

296. During the Relevant Period, Plaintiff Schwab Cash Reserves purchased an aggregate of $2.59 billion of floating-rate instruments, including bank notes and debt, financial

institutions funding notes, mortgage discount notes, mortgage loans, and other mortgage-related instruments, that were affected by Defendants' suppression of LIBOR. Of those, Plaintiff purchased $580 million of instruments from Defendant JPMorgan Chase and purchased more than $1 billion of instruments from dealer entities that were subsidiaries or other affiliates of Defendants.

297. During the Relevant Period, Plaintiff Schwab Cash Reserves purchased an aggregate of $146.7 billion of fixed-rate instruments with a remaining maturity of between five and 365 days at the time of purchase, including bank and financial institutions funding notes and debt, mortgage discount notes, mortgage loans, and other mortgage-related instruments, that were affected by Defendants' suppression of LIBOR. Of those, Plaintiff purchased more than $38 billion of instruments from Defendants Citibank, Deutsche Bank, and JPMorgan Chase, collectively, and purchased more than $47 billion of instruments from dealer entities that were subsidiaries or other affiliates of Defendants.

12. <u>Schwab Advisor Cash Reserves</u>

During the Relevant Period, Plaintiff Schwab Advisor Cash Reserves purchased an aggregate of $2.2 billion of floating-rate instruments, including bank notes and debt, financial institutions funding notes, mortgage discount notes, mortgage loans, and other mortgage-related instruments, that were affected by Defendants' suppression of LIBOR. Of those, Plaintiff purchased $106 million of instruments from Defendant JPMorgan Chase and purchased more than $1.4 billion of instruments from dealer entities that were subsidiaries or other affiliates of Defendants.

298. During the Relevant Period, Plaintiff Schwab Advisor Cash Reserves purchased an aggregate of $116.5 billion of fixed-rate instruments with a remaining maturity of between five and 365 days at the time of purchase, including bank notes and debt, mortgage discount notes, mortgage loans, and other mortgage-related instruments, that were affected by Defendants' suppression of LIBOR. Of those, Plaintiff purchased more than $29 billion of instruments from Defendants Citibank, Deutsche Bank, JPMorgan Chase, and UBS, collectively,

and purchased more than $40 billion of instruments from dealer entities that were subsidiaries or other affiliates of Defendants.

13. Schwab YieldPlus Fund

299. As of July 1, 2007, Plaintiff Schwab YieldPlus Fund held an aggregate of $3.7 billion of floating-rate instruments, including corporate debt and bank and financial institutions funding notes, that were affected by Defendants' suppression of LIBOR during the Relevant Period.

300. During the Relevant Period, Plaintiff purchased an aggregate of $13.6 billion of fixed-rate instruments with a remaining maturity of between five and 365 days at the time of purchase, including corporate debt, financial institutions funding debt, mortgage discount notes, mortgage loans, and other mortgage-related instruments, that were affected by Defendants' suppression of LIBOR. Of those, Plaintiff purchased more than $5 billion of instruments from Defendant JPMorgan Chase and purchased more than $5.2 billion of instruments from dealer entities that were subsidiaries or other affiliates of Defendants.

VIII. CIVIL CONSPIRACY

301. As set forth above, Defendants, either expressly or tacitly, reached a common plan or design to suppress USD LIBOR during the Relevant Period. Each Defendant agreed to the scheme with actual knowledge of the unlawful plan to suppress LIBOR.

302. Defendants each committed numerous acts in furtherance of that agreement, including submitting false LIBOR quotes to the BBA throughout the Relevant Period and actively concealing their misconduct, including by making false or misleading public statements concerning LIBOR.

303. Through their misconduct in artificially suppressing LIBOR during the Relevant Period, Defendants defrauded Plaintiffs and other investors in LIBOR-based financial instruments.

304. Defendants' conspiracy harmed Plaintiffs by causing them to receive lower returns on LIBOR-based financial instruments and/or to overpay for such instruments.

305. Accordingly, each Defendant is being sued both individually as a primary violator of the law, as stated in this Complaint, and as a co-conspirator as provided for under state law. As a co-conspirator, each Defendant is jointly and severally liable for the torts committed by its fellow Defendants.[215]

IX. CLAIMS FOR RELIEF

FIRST CLAIM FOR RELIEF

Fraud, Deceit, and Concealment

306. Plaintiffs incorporate by reference and reallege the preceding allegations as though fully set forth herein.

307. In connection with issuing, offering, and/or selling billions of dollars in LIBOR-based financial instruments purchased by Plaintiffs during the Relevant Period, Defendants made materially false or misleading statements, or misleadingly omitted to state material facts, in two primary ways: (i) by making false USD LIBOR submissions to the BBA continually throughout the Relevant Period; and (ii) by (a) falsely or misleadingly representing, in materials disseminated to Plaintiffs during the Relevant Period in connection with Plaintiffs' purchase of LIBOR-based financial instruments, that the rates of return assigned to those financial instruments were tied or indexed to, or otherwise derived from, a USD LIBOR that reflected the LIBOR panel banks' true costs of borrowing, and/or (b) omitting to state in those materials that the rates of return assigned to the subject financial instruments were tied or indexed to, or otherwise derived from, an improperly suppressed USD LIBOR.

308. Plaintiffs purchased LIBOR-based financial instruments issued and/or sold by Defendants or other entities, including broker-dealer subsidiaries or affiliates of Defendants.

309. Each Defendant owed a duty to Plaintiffs to honestly and accurately report USD LIBOR and not to intentionally mislead Plaintiffs and others by secretly and collectively

[215] Under California law, "[c]onspiracy is not an independent tort," but rather "allows tort recovery . . . against a party who already owes the duty and is not immune from liability based on applicable substantive tort law principles." *Applied Equip. Corp. v. Litton Saudi Arabia Ltd.*, 869 P.2d 454, 459 (Cal. 1994).

manipulating LIBOR for their gain and to the detriment of others in the financial markets. Defendants' duty arose from representations they made, individually and/or through the BBA, that LIBOR was a reliable indicator of the state of the money markets, that LIBOR was a reliable barometer of risk, that LIBOR reflected competitive rates in the London interbank lending market, and other such public representations.

310. As described above, beginning in August 2007 and continuing through at least May 2010, each Defendant falsely represented on a daily basis that (i) Defendant's USD LIBOR submissions were consistent with the published definition of LIBOR; (ii) Defendant based its USD LIBOR submissions on Defendant's honest perception of its cost of funds in the London interbank market without reference to rates submitted by other Defendants; and (iii) Defendant's USD LIBOR submissions represented the actual competitive rates at which Defendant honestly believed another bank would offer it funds in the London interbank market.

311. Defendants made those representations knowing they were false, or with reckless disregard for their truth, as Defendants knowingly or recklessly made daily USD LIBOR submissions to the BBA that did not reflect Defendants' true costs of borrowing but instead reflected Defendants' scheme to unlawfully manipulate LIBOR.

312. Defendants' misstatements or omissions in connection with making false LIBOR submissions to the BBA, and in causing LIBOR to be artificially suppressed during the Relevant Period, also caused statements or other representations regarding LIBOR in offering materials or other documents issued in connection with transactions in LIBOR-based financial instruments to be materially false or misleading. Indeed, this Court has held:

> If the offering materials described how LIBOR was calculated by reference to the "proper" procedures rather than the manipulation that allegedly was occurring, they would contain a material misrepresentation. If they did not describe how LIBOR was calculated, they would still be omitting that LIBOR was being manipulated, surely a material omission.[216]

313. Defendants are liable for the false or misleading statements contained in offering materials or other documents issued in connection with Plaintiffs' transactions in LIBOR-based

[216] *LIBOR I*, 935 F. Supp. at 728.

financial instruments, either because Defendants made those statements directly or are otherwise liable for those statements under the principle of *respondeat superior* or vicarious liability.

314. Defendants never disclosed to Plaintiffs the inaccuracy of their quotes to the BBA or that Defendants had manipulated LIBOR to cause it to be lower than it should have been.

315. The inaccuracy of Defendants' reported quotes, and Defendants' scheme to manipulate LIBOR, were material facts of which Plaintiffs were unaware. If Defendants had disclosed those facts, Plaintiffs would not have purchased the subject financial instruments or at least would have demanded appropriately higher interest rates on those instruments. Plaintiffs relied on the accuracy of Defendants' quotes, on the integrity and accuracy of LIBOR, and on the other statements by Defendants that did not include these material omissions.

316. Defendants recognized the importance of USD LIBOR and falsely and publicly held it out as a trustworthy benchmark. In doing so, Defendants intended for Plaintiffs and others to rely on Defendants' false representations of material fact. Plaintiffs reasonably relied on those false representations of material fact in deciding whether to do business with Defendants.

317. Additionally, as a result of Defendants' omission of material fact in connection with representations made to Plaintiffs, Plaintiffs are entitled to an inference or presumption of reliance.

318. As a direct and proximate result of Defendants' false or misleading submissions to the BBA, USD LIBOR was artificially suppressed during the Relevant Period.

319. In addition to making false or misleading submissions to the BBA, Defendants caused the offering materials or other transaction documents provided to Plaintiffs or their agents in connection with purchases of LIBOR-based financial instruments to contain false or misleading statements, or to omit to state facts that, if disclosed, would have rendered those statements false or misleading.

320. Defendants' concealment of the inaccuracy of their reported quotes and their scheme to manipulate LIBOR damaged Plaintiffs because Plaintiffs received lower returns (i.e.,

lower interest rates) than they would have had LIBOR been accurately and honestly set, or had Plaintiffs purchased financial instruments not paying interest as a function of LIBOR.

321. Each Defendant aided and abetted the fraud of every other Defendant by committing acts, including making false or misleading representations, that were intended to, and did, suppress LIBOR as alleged above.

SECOND CLAIM FOR RELIEF

Aiding and Abetting Fraud

322. Plaintiffs incorporate by reference and reallege the preceding allegations as though fully set forth herein.

323. Defendants committed aiding and abetting common law fraud by knowingly providing substantial assistance in furtherance of the fraudulent activity described in the First Claim for Relief above.

324. Each Defendant provided substantial assistance to every other Defendant, and in so doing allowed the fraud to be consummated and continue throughout the Relevant Period. Each Defendant aided and abetted the fraud of every other Defendant by committing acts, including making false or misleading representations, that were intended to, and did, suppress LIBOR as alleged above.

325. As a result of each Defendant's aiding and abetting the fraud of every other Defendant, Plaintiffs suffered damages because Plaintiffs received lower returns (i.e., lower interest rates) than they would have had LIBOR been accurately and honestly set, or had Plaintiffs purchased financial instruments not paying interest indexed, tied to, or otherwise referenced to LIBOR.

THIRD CLAIM FOR RELIEF

Violation of Section 17200 of the California Business and Professions Code (Unfair Business Practices)

326. Plaintiffs incorporate by reference and reallege the preceding allegations as though fully set forth herein.

327. Defendants have engaged in fraudulent, unfair, and illegal conduct in violation of Section 17200 of the California Business and Professions Code ("Section 17200"). Defendants' conduct was substantially injurious to Plaintiffs.

328. Defendants' business acts and practices, as alleged herein, constituted a continuous course of unfair competition by means of unfair, unlawful, or fraudulent business acts or practices in violation of Section 17200, including (i) the violations of federal and state securities laws and other laws as set forth in this Complaint; and (ii) Defendants' unfair and fraudulent business acts and practices, which induced investors, including Plaintiffs, to purchase and retain the LIBOR-based financial instruments Defendants or others issued based on falsely set LIBOR rates, and Defendants' materially false and misleading statements about their costs of borrowing, made with knowledge or reckless disregard that they were materially false or misleading when made.

329. Defendants' misstatements and omissions alleged in this Complaint were material in that a reasonable person would attach importance to such information and would be induced to act upon such information in making decisions concerning purchases of LIBOR-based financial instruments.

330. Defendants' misstatements and omissions alleged in this Complaint are objectively material to the reasonable consumer, thus reliance upon such misstatements and omissions may be presumed as a matter of law.

331. Defendants' business acts and practices, as alleged herein, have caused Plaintiffs to purchase and retain the subject LIBOR-based financial instruments and, as a result, to suffer losses.

332. Plaintiffs are entitled to full relief, including full restitution or disgorgement of all revenues, earnings, profits, compensation, and benefits Defendants may have obtained as a result of such business, acts, or practices, and an injunction mandating that Defendants cease and desist from engaging in the practices described herein.

333. Each Defendant aided and abetted the fraud of every other Defendant by committing acts, including making false or misleading representations, that were intended to, and did, suppress LIBOR as alleged above.

FOURTH CLAIM FOR RELIEF

Interference with Prospective Economic Advantage

334. Plaintiffs incorporate by reference and reallege the preceding allegations as though fully set forth herein.

335. As set forth in this Complaint, Defendants manipulated LIBOR in violation of federal and state law.

336. An economic relationship existed between Plaintiffs and issuers or sellers of LIBOR-based financial instruments, which obligated the issuers or sellers to make payments to Plaintiffs at a rate dependent on LIBOR.

337. Defendants' unlawful manipulation of LIBOR interfered with and disrupted that relationship by defeating the parties' expectations that LIBOR would be set honestly and accurately and would provide a fair benchmark for those LIBOR-based financial instruments. As a result, Plaintiffs received lower payments on those instruments than they otherwise would have, and overpaid for the instruments, and were damaged thereby.

338. Defendants acted with the knowledge that interference or disruption of Plaintiffs' relationships with issuers or sellers of LIBOR-based financial instruments were certain or substantially certain to result from Defendants' unlawful manipulation of LIBOR.

339. Each Defendant aided and abetted the fraud of every other Defendant by committing acts, including making false or misleading representations, that were intended to, and did, suppress LIBOR as alleged above.

FIFTH CLAIM FOR RELIEF

Breach of the Implied Covenant of Good Faith and Fair Dealing

340. Plaintiffs incorporate by reference and reallege the preceding allegations as though fully set forth herein.

341. Plaintiffs contracted to purchase LIBOR-based financial instruments from Defendants or dealer entities that were subsidiaries or other affiliates of Defendants.

342. Plaintiffs performed all of their obligations under the applicable contracts.

343. All conditions required for Defendants' performance of those contracts were satisfied.

344. Defendants unfairly interfered with Plaintiffs' right to receive the benefits of the subject contracts by secretly manipulating LIBOR to be lower than it otherwise would have been, as alleged in this Complaint.

345. Plaintiffs received less interest and lower returns on the LIBOR-based financial instruments than they would have absent Defendants' manipulation of LIBOR, and were therefore harmed.

SIXTH CLAIM FOR RELIEF

Violation of Sections 25400 and 25401 of the California Corporations Code

346. Plaintiffs incorporate by reference and reallege the preceding allegations as though fully set forth herein.

347. Defendants, and each of them, acting individually or through a scheme and conspiracy, directly and indirectly, induced Plaintiffs' purchase and retention of the subject LIBOR-based financial instruments by circulating or disseminating, in or from California, information for the purpose of inducing Plaintiffs to purchase and hold LIBOR-based financial instruments. Defendants omitted to inform Plaintiffs that they were engaged in ongoing misconduct to suppress LIBOR that would cause any purchaser or holder of the subject LIBOR-based financial instruments to receive lower payments than it otherwise would.

348. Defendants knew their statements were false or misleading in light of the circumstances under which they were made. Defendants intended that Plaintiffs would be misled and would purchase LIBOR-based financial instruments based on false information. Despite their knowledge, Defendants continued to make the misrepresentations to induce Plaintiffs to purchase LIBOR-based financial instruments.

349. Defendants, and each of them, are liable under Sections 25500 and 25501 of the California Corporations Code for willfully participating in acts or transactions in violation of Sections 25400 and 25401 of the Corporations Code or for knowingly providing substantial assistance to violations of Sections 25400 and 25401 in violation of Section 25403. Defendants are therefore liable to Plaintiffs, who purchased LIBOR-based financial instruments at prices affected by Defendants' acts, for damages sustained as a result of such violations.

350. Under Section 25504 of the California Corporations Code, Defendants, and each of them, are also liable as control persons, officers, principals, employees, broker-dealers, or agents who provided material aid to a person in violation of Section 25503.

351. Plaintiffs are entitled to prejudgment interest at the legal rate on their economic damages.

SEVENTH CLAIM FOR RELIEF

Rescission of Contract

352. Plaintiffs incorporate by reference and reallege the preceding allegations as though fully set forth herein.

353. Plaintiffs purchased subject LIBOR-based financial instruments pursuant to contracts in writing between Plaintiffs and the dealers from which they purchased those financial instruments. Each contract stated the consideration Plaintiffs paid each dealer for each instrument.

354. In making each contract to purchase subject LIBOR-based financial instruments, Plaintiffs relied on the truth of the statements Defendants made in the offering materials issued in connection with the issuance and sale of those instruments. Because those statements were untrue or misleading, Plaintiffs were mistaken about their basic assumptions underlying their purchases of those instruments, and that mistake had a material adverse effect on the agreed-upon exchange represented by Plaintiffs' purchase of each instrument.

355. Because Defendants were responsible to provide accurate information in the offering materials, Plaintiffs did not assume, nor do they bear, the risk of the fundamental mistake underlying their decisions to purchase those instruments.

356. Defendants obtained Plaintiffs' consents to the contracts to purchase the subject LIBOR-based financial instruments by means of Defendants' assertion, as facts, of that which was not true, when Defendants had no reasonable ground for believing those assertions were true.

357. Plaintiffs are entitled to rescind, and do hereby demand the rescission of, each contract for the sale and purchase of subject LIBOR-based financial instruments. Plaintiffs offer to restore all benefits they have received under those contracts and are entitled to recover all consideration paid under them.

EIGHTH CLAIM FOR RELIEF

Unjust Enrichment

358. Plaintiffs incorporate by reference and reallege the preceding allegations as though fully set forth herein.

359. By means of their unlawful conduct set forth in this Complaint, including misrepresenting their costs of borrowing to the BBA to manipulate LIBOR, Defendants knowingly acted in an unfair, unconscionable, and oppressive manner toward Plaintiffs.

360. Through their unlawful conduct, Defendants knowingly received and retained wrongful benefits and funds from Plaintiffs. Defendants thereby acted with conscious disregard for Plaintiffs' rights.

361. As a result of their unlawful conduct, Defendants have realized substantial ill-gotten gains. Defendants have unlawfully manipulated LIBOR at the expense of, and to the detriment of, Plaintiffs, and to Defendants' benefit and enrichment.

362. Plaintiffs' detriment and Defendants' enrichment are traceable to, and resulted directly and proximately from, the conduct challenged in this Complaint.

363. Under the common law doctrine of unjust enrichment, it is inequitable to permit Defendants to retain the benefits they received, and are still receiving, without justification, from their manipulation of LIBOR in an unfair, unconscionable, and oppressive manner. Defendants' retention of such funds under circumstances making it inequitable to do so constitutes unjust enrichment.

364. The financial benefits Defendants derived rightfully belong to Plaintiffs. The Court should compel Defendants to disgorge, in a common fund for Plaintiffs' benefit, all unlawful or inequitable proceeds Defendants received. The Court should impose a constructive trust upon all unlawful or inequitable sums Defendants received that are traceable to Plaintiffs.

365. Plaintiffs have no adequate remedy at law.

NINTH CLAIM FOR RELIEF

Violation of Section 10(b) of the Exchange Act, 15 U.S.C. § 78j(b), and SEC Rule 10b-5 Promulgated Thereunder, 17 C.F.R. § 240.10b-5

366. Plaintiffs incorporate by reference and reallege the preceding allegations as though fully set forth herein.

367. This Count is asserted only to the extent the LIBOR-based financial instruments purchased by Plaintiffs during the Relevant Period constitute securities.

368. In connection with issuing, offering, and/or selling LIBOR-based financial instruments purchased by Plaintiffs during the Relevant Period, Defendants made materially false or misleading statements, or misleadingly omitted to state material facts, in two primary ways: (i) by making false USD LIBOR submissions to the BBA continually throughout the Relevant Period; and (ii) by (a) falsely or misleadingly representing, in materials disseminated to Plaintiffs during the Relevant Period in connection with Plaintiffs' purchase of LIBOR-based financial instruments, that the rates of return assigned to those financial instruments were tied or indexed to, or otherwise derived from, a USD LIBOR that reflected the LIBOR panel banks' true costs of borrowing, and/or (b) omitting to state in those materials that the rates of return assigned to the subject financial instruments were tied or indexed to, or otherwise derived from, an improperly suppressed USD LIBOR. In furtherance of this unlawful scheme, plan, and course of

conduct, Defendants jointly and individually (and each of them) took the actions set forth in this Complaint.

369. Defendants (a) employed devices, schemes, and artifices to defraud; (b) made untrue statements of material fact and/or omitted to state material facts necessary to make the statements not misleading; and (c) engaged in acts, practices, and a course of business that operated as a fraud and deceit upon the purchasers of LIBOR-based financial instruments, in an effort to pay artificially low rates of return on those instruments, in violation of Section 10(b) of the Exchange Act and SEC Rule 10b-5. Defendants are sued as primary participants in the wrongful and illegal conduct charged in this Complaint.

370. Defendants, individually and in concert, directly and indirectly, by the use, means, or instrumentalities of interstate commerce and/or of the mails, engaged and participated in a continuous course of conduct to make false or misleading submissions to the BBA, artificially suppress LIBOR, and deprive Plaintiffs and other investors of their true rates of return on LIBOR-based financial instruments purchased during the Relevant Period, as specified in this Complaint.

371. Defendants employed devices, schemes, and artifices to defraud, while in possession of material adverse non-public information, and engaged in acts, practices, and a course of conduct as alleged in this Complaint, which included the making of, or the participation in the making of, untrue statements of material facts and omitting to state material facts necessary in order to make the statements made, in the light of the circumstances under which they were made, not misleading, as set forth more particularly above, and engaged in transactions, practices, and a course of business that operated as a fraud and deceit upon the purchasers of LIBOR-based financial instruments during the Relevant Period.

372. Defendants are liable for all false and misleading statements of material fact, and omissions of material fact, made during the Relevant Period, as alleged above.

373. Defendants are further liable for the false and misleading statements of material fact, and omissions of material fact, made by Defendants' officers, representatives, agents,

subsidiaries, or affiliates, as the makers of such statements and under the principle of *respondeat superior*.

374. Defendants acted with scienter throughout the Relevant Period in that they had actual knowledge of the misstatements and omissions of material facts set forth in this Complaint, or acted with reckless disregard for the truth in that they failed to ascertain and to disclose those facts. Defendants' material misstatements and omissions were made knowingly or with recklessness for the purpose and effect of supporting an artificially suppressed LIBOR rate and artificially low rates of return on LIBOR-based financial instruments sold to Plaintiffs. As demonstrated by Defendants' material misstatements and omissions throughout the Relevant Period, if they did not have actual knowledge of the misstatements and omissions alleged, Defendants were reckless in failing to obtain such knowledge, i.e., by recklessly refraining from taking the steps necessary to discover whether those statements were false or misleading.

375. As a result of the dissemination of false and misleading statements of material fact and omissions of material fact, as set forth above, the rates of return of LIBOR-based financial instruments purchased by Plaintiffs were artificially suppressed during the Relevant Period. In ignorance of that fact, and relying directly or indirectly on the materially false and misleading statements made by Defendants, or on the integrity of the market in which the securities trade, and/or on the absence of material adverse information that was known to or recklessly disregarded by Defendants but not disclosed in public statements by them during the Relevant Period, Plaintiffs purchased or otherwise acquired LIBOR-based financial instruments during the Relevant Period that bore artificially low rates of return, and were damaged by Defendants' false or misleading statements of material fact or omissions of material fact.

376. At the time of Defendants' material misstatements and omissions, Plaintiffs were ignorant of their falsity, and Defendants' material omissions. Had Plaintiffs and the marketplace known the truth, Plaintiffs would not have purchased (or otherwise acquired) their LIBOR-based financial instruments, or, if Plaintiffs had purchased (or otherwise acquired) such instruments

during the Relevant Period, they would not have done so for the artificially depressed rates of return Plaintiffs received.

377. By virtue of the foregoing, Defendants have violated Section 10(b) of the Exchange Act and SEC Rule 10b-5 promulgated thereunder.

378. As a direct and proximate result of Defendants' wrongful conduct, Plaintiffs suffered damages in connection with their purchases (or other acquisitions) and sales of LIBOR-based financial instruments during the Relevant Period.

TENTH CLAIM FOR RELIEF

Violation of Section 20(a) of the Exchange Act, 15 U.S.C. § 78t(a)

379. Plaintiffs incorporate by reference and reallege the preceding allegations as though fully set forth herein.

380. Each of the Defendants, by virtue of its position as a parent company or otherwise controlling entity of one or more entities that issued or sold LIBOR-based securities to Plaintiffs and other investors during the Relevant Period, was a control person of those entities.

381. Furthermore, as set forth above, each of the Defendants was a culpable participant in the fraud alleged in this Complaint, and each of those Defendants violated Section 10(b) of the Exchange Act and SEC Rule 10b-5 by its acts and omissions as alleged in this Complaint.

382. As a direct and proximate result of Defendants' wrongful conduct, Plaintiffs suffered damages in connection with their purchases (or other acquisitions) of LIBOR-based financial instruments during the Relevant Period.

ELEVENTH CLAIM FOR RELIEF

Violation of Section 11 of the Securities Act of 1933, 15 U.S.C. § 77k

383. Plaintiffs incorporate by reference and reallege the preceding allegations as though fully set forth herein.

384. For purposes of this claim, Plaintiffs expressly disclaim and exclude any allegations that could be construed as alleging fraud or intentional or reckless misconduct, as this

cause of action is based expressly on claims of strict liability or negligence under the Securities Act.

385. Plaintiffs bring this claim in connection with all LIBOR-based securities Plaintiffs purchased in, or traceable to, offerings during the Relevant Period.

386. Each Defendant filed registration statements and other related documents in connection with each of the subject offerings.

387. Those registration statements and other related documents contained materially false statements of fact, or omitted to state facts necessary to make the statements therein not misleading. Specifically, the documents omitted to state that Defendants, as set forth above, had artificially suppressed LIBOR by providing inaccurate quotes to the BBA and that Defendants perpetuated an ongoing scheme to continue their manipulation. Moreover, representations in the subject registration statements and related documents that the interest rates for the subject securities would be based on LIBOR were false or misleading as a result of Defendants' manipulation of LIBOR. Thus references to "LIBOR" in those documents constitute affirmative misstatements.

388. None of the Defendants made a reasonable investigation or possessed reasonable grounds to believe that the statements contained in the registration statements were true or that there was no omission of material facts necessary to make the statements made therein not misleading.

389. By reason of the conduct herein alleged, each Defendant violated Section 11 of the Securities Act.

390. As a direct and proximate result of Defendants' acts and omissions in violation of the Securities Act, the prices or values of the securities sold in the subject offerings were artificially inflated, and Plaintiffs suffered substantial damage in connection with their ownership of those securities.

391. As issuers or underwriters of the subject securities, each Defendant is liable under Section 11 to Plaintiffs for the material omissions identified above.

392. Plaintiffs obtained the subject securities without knowledge of the facts concerning the misstatements or omissions alleged herein.

393. Plaintiffs are entitled to damages under Section 11 from each Defendant, as measured by the provisions of Section 11(e).

TWELFTH CLAIM FOR RELIEF

Violation of Section 12(a)(2) of the Securities Act of 1933, 15 U.S.C. § 77l(a)(2)

394. Plaintiffs incorporate by reference and reallege the preceding allegations as though fully set forth herein.

395. For purposes of this claim, Plaintiffs expressly disclaim and exclude any allegations that could be construed as alleging fraud or intentional or reckless misconduct, as this cause of action is based expressly on claims of strict liability or negligence under the Securities Act.

396. Defendants were sellers, offerors, underwriters, or solicitors of sales of securities issued through prospectuses or oral communications during the Relevant Period.

397. The prospectuses or oral communications contained untrue statements of material facts, omitted to state other facts necessary to make the statements made not misleading, and concealed and failed to disclose material facts. Defendants' actions of solicitation included participating in the preparation of the false and misleading prospectuses or oral communications.

398. Defendants owed to the purchasers of the subject securities, including Plaintiffs, the duty to make a reasonable and diligent investigation of the statements contained in the prospectuses or oral communications, to insure that such statements were true and that there was no omission to state a material fact required to be stated in order to make the statements contained therein not misleading. Defendants knew of, or in the exercise of reasonable care should have known of, the misstatements and omissions contained in the prospectuses or oral communications, as set forth above.

399. Plaintiffs purchased or otherwise acquired securities pursuant to or traceable to the defective prospectuses or oral communications. Plaintiffs did not know, nor in the exercise of reasonable diligence could have known, of the untruths and omissions.

400. Plaintiffs hereby offer to tender to Defendants those securities Plaintiffs continue to own, in return for the considerations paid for those securities, together with interest thereon.

401. By reason of the conduct alleged herein, Defendants violated, or controlled a person who violated, Section 12(a)(2) of the Securities Act. Accordingly, Plaintiffs have the right to rescind and recover the consideration paid for the subject securities and hereby elect to rescind and tender those securities to Defendants. Plaintiffs are entitled to rescissionary damages with respect to those subject securities they have sold.

THIRTEENTH CLAIM FOR RELIEF

Violation of Section 15 of the Securities Act of 1933, 15 U.S.C. § 77o

402. Plaintiffs incorporate by reference and reallege the preceding allegations as though fully set forth herein.

403. This cause of action is being brought under Section 15 of the Securities Act, 15 U.S.C. §77o, against Defendants. This Count is based solely on strict liability and negligence, and does not sound in fraud. Any allegations of fraud or fraudulent conduct or motive are specifically excluded. For purposes of asserting this and its other claims under the Securities Act, Plaintiffs do not allege that Defendants acted with intentional, reckless, or otherwise fraudulent intent.

404. Each of the Defendants, by virtue of its position as a parent company or otherwise controlling entity of one or more entities that issued or sold LIBOR-based securities to Plaintiffs and other investors during the Relevant Period, was a control person of those entities.

405. As a result, Defendants are liable under Section 15 of the Securities Act for those securities dealers' primary violations of Sections 11 or 12(a)(2) of the Securities Act.

X. PRAYER FOR RELIEF

WHEREFORE, Plaintiffs pray for relief as follows:

(A) That the Court enter an order declaring that Defendants' actions as set forth in this Complaint, and in other respects, violate the law;

(B) That the Court enter judgment awarding Plaintiffs damages against Defendants for all economic, monetary, actual, consequential, and compensatory damages Plaintiffs suffered as a result of Defendants' conduct, or rescission, together with pre- and post-judgment interest at the maximum rate allowable by law;

(C) That the Court award Plaintiffs exemplary or punitive damages against Defendants to the extent allowable by law;

(D) That the Court order the disgorgement of the ill-gotten gains Defendants derived from their misconduct;

(E) That the Court award Plaintiffs restitution of all amounts they paid to Defendants as consideration for financial instruments affected by Defendants' misconduct;

(F) That the Court issue an injunction prohibiting Defendants from engaging in the misconduct alleged in this Complaint;

(G) That the Court award Plaintiffs their costs of suit, including reasonable attorneys' fees and expenses; and

(H) That the Court award such other and further relief as the Court may deem just and proper.

Dated: October 6, 2014

LIEFF, CABRASER, HEIMANN & BERNSTEIN, LLP

By: ______________________________

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Attorneys for Plaintiffs

XI. DEMAND FOR JURY TRIAL

Plaintiffs hereby demand a trial by jury of all issues so triable.

Dated: October 6, 2014

LIEFF, CABRASER, HEIMANN & BERNSTEIN, LLP

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